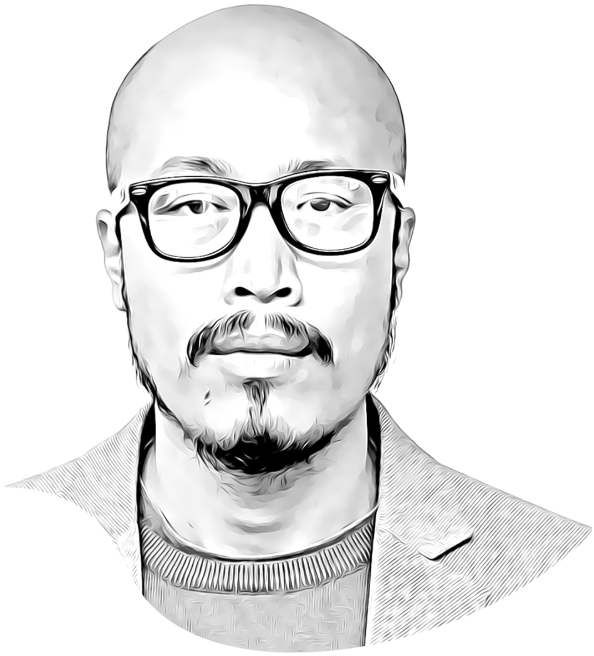
SAMRIDDHI FOUNDATION

ECONOMIC FREEDOM

a compendium of essays

Edited by **Akash Shrestha**

Editor's Note



Economic Freedom

In Nepal, concepts like economic freedom, liberalisation and deregulation have historically been tied up with, and followed by periods of economic tensions. In the late 1980s, these were brought into deliberation in the aftermath of economic downturn. Reforms of the 1990s gave these deliberations life and the reforms in turn uplifted the economy and people. After a hiatus in reforms owing to civil war and transitional period lasting a total of two decades, the government hinted at some form of affinity towards these concepts again in the aftermath of COVID-19 (and after long periods of nation-wide lockdowns). Some regulations concerning trade and doing business were immediately relaxed to battle shortages of protective equipment. But economic freedom and liberalisatioin do not need periods of economic shocks and downturns to make sense. These concepts are important in and of themselves because they create opportunities for the people to help themselves – in case of Nepal, to lift them out of poverty ...

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In contemporary public discourses, one gets a sense that these ideas are thought of as western concepts and do not suit the realities and needs of Nepal. Problems of the day are used as a pretext to substantiate the need of government and state interventions over markets. In this compendium, authors try to dissect this notion.

Ayushma Maharjan delves into the evolution of housing in the capital city of Kathmandu and finds that concepts like markets and spontaneous order are indigenous to Nepal. Historically, fellow denizens, through their individual actions, were capable of creating efficient and sustainable solutions to problems in a society.

Surath Giri dissects Nepal's vulnerability to economic shocks and shows that they stem from two perennial problems of the Nepali economy – high unemployment rates and a high level of the informal economy. Borrowing lessons from Hernando De Soto's works in Peru, he concludes that enhancing economic freedom and reforming business environment should be the top priority if Nepal is to make a significant dent on its endeavour to prosperity.

Against this backdrop, our other authors then dissect Nepal's existing legislative regime and practicalities within some of the key sectors of the economy like agriculture, trade, transport and remittance. They find that our archaic, stringent and excessive legislations have deprived many individuals of their right to earn a decent livelihood through self-enterprising. Revisiting key economic sectors reveals that in many instances, our priorities have been misplaced and authors offer insights into how market-friendly approaches could assist more in the national endeavour for prosperity. They also stress that legislators need to acknowledge the fact that legislations can trail innovation and enterpreneurship, esp. in the current day and age where technologies evolve rapidly.

Authors in the second half of the compendium further offer economic freedom and markets as the pathway for tomorrow, delving into potential major discourses of the future viz. resource management in the federal context and development priorities and policies for a middle-income Nepal.

In the final piece, Prakash Maharjan examines the state-led social security programs and highlights the importance of competition – another key component of the market – between products offered by the state as well such that citizens benefit from ensuing choice, until those are replaced by the market.

Akash Shrestha

Inside...

Spontaneous Order

- *Ayushma Maharjan*

Two centuries ago, Kathmandu Valley was mostly an agrarian society; the population was small; and people mostly used in joint families.

Houses in Kathmandu had a peculiar feature. The ground floor always consisted of a shop, store-room or a cow-shed, as the weather was very cold and it would be impossible to spend the nights there. The first floor comprised of bedrooms with small windows. With people spending their entire day at the fields, lights in the bedrooms were not very valuable. The living room in the second floor was huge and could accommodate quite a number of guests. Lastly, the kitchen was always at the top as cooking at the uppermost story would prevent smoke from spreading throughout the house. The roofs of the house were sloped on both sides to allow rainwater to drain and the stories of the houses were small in height for heating purposes. All activities like bathing, washing clothes and using the toilet were conducted outside the house. One of the most important features of the houses were that they were built to accommodate a single family. The families sometimes allowed travelers and guests to spend the night but apartments for the purpose of renting out were not available. Over a period of time, the houses evolved, but only in terms of beautification purposes. The internal design remained intact.

However, this was soon to be changed after the mid-1900s. People across Nepal realized the enormous economic opportunities available in Kathmandu Valley and thus started migrating. Additionally, threat of different conflicts like the Maoist Insurgency led many people to leave their hometown and migrate to Kathmandu. As a result, the population in Kathmandu Valley, which increased only gradually prior to 1950, increased drastically by 95 percent from 1950 to 1970, and by 238 percent from 1970 to 2011.

With increase in population from mere 0.6 million in 1970 to astounding 2.09 million in 2011, the need for housing in Kathmandu Valley increased rapidly. Additionally, there was a need to supply housing for people belonging to different economic backgrounds, different cultural backgrounds, and different tastes and preferences. One can imagine that in a valley with all houses being built for a single family, accommodating millions of new inhabitants and satisfying each one of them was a far too complex problem to resolve.

However, the problem seemed to have resolved effortlessly and in real time. The people living in Kathmandu viewed the migration as an economic opportunity and since late 1900s started building modern houses consisting multiple apartments with attached kitchens and toilets for the purpose of renting out.

Additionally, they created diverse houses that managed to satisfy the needs of diverse people.

One might be surprised to realize that individual human actions unintentionally led to resolving what could have been a daunting problem for millions of people migrating to Kathmandu without any planning and a central authority asking individuals to do what needed to be done. This is a proof that human beings through their actions are capable of creating efficient and sustainable solutions to problems in a society. All that people in Kathmandu had in the mid-1900s was freedom to pursue their self-interest – economically benefit by renting out apartments. While doing so, they unintentionally ended up creating a tremendously beneficial residential, and social system.

This phenomenon in economic and social science is known as spontaneous order. The idea of a spontaneous society emerged from the realization that the regularities and order in the society that we live in were actually the product of individual human actions and not of deliberate human planning, design, and intention. Social orders which seems to be created by an omniscient designing mind, are actually the outcome of actions of millions of individuals pursuing their self-interest without any intention of creating overall societal norms.

If we scrutinize on our daily lives, we will realize that there are abundant of examples which depict the spontaneous order at play. One of the most prominent ones is the human language - most marvelous discovery of human civilization. There are thousands of different languages in the world which have been assisting billions of people to communicate. The pronunciations and rules of grammar of each language are equally complex that one cannot even describe all the rules perfectly. Yet, each individual is flawless in their respective language. It is astonishing that the many languages were not consciously designed by any authorities but naturally evolved over time with the need of efficient communication. Any central planner or government institutions could not create rules of such complexity, subtly and effectively.

Another spectacular example is the evolution of mail delivery system. Traditionally, the task of mail delivery was conducted by trained birds, which were later replaced by postmen as undertaking the activity was economically beneficial to the men. Today, it is gradually being replaced by a more efficient mechanism – the internet. This phenomenal achievement was the result of experimentation by individuals in an attempt to resolve the inefficiencies that they experienced in the society.

Ideas generated by individuals that are guided by their tradition, culture or experience, have proven to be more creative and adaptive. This is because human societies are complex as they consist of different individuals with different taste, preference, culture, attitude and opinions. This simply implies that it is impossible for authorities to deliberately plan the workings of a human society in order to satisfy each and every individual. The information of problems and needs in a society is held by millions of individuals as they experience in their everyday lives and it is unmanageable for a few individuals in the government to have all the required knowledge. Thus, while the government authorities try to make decisions for everyone in the society based on limited knowledge, they can never come up with the most optimal solution.

For instance, what if the government had to come up with the solution of providing accommodation to millions of people migrating to Kathmandu Valley? They would have no choice but to make same apartments for everyone to ensure equity. The Bhutanese experience can help understand its consequences. In Bhutan, the building rules and regulations makes it mandatory for everyone to build houses that are consistent with the architectural guidelines that aims to preserve the traditions of Bhutan. The decisions regarding location and design of the building is thus taken by the local government. However, the decision led to all individuals – both rich and poor - having to pay equal amount of money for building houses which is quite expensive. This has resulted in shortage of houses and the rent has sky-rocketed – people pay at least 40 percent of their income on house rent. Moreover, as the urban areas of Bhutan are being congested and increasing housing supply is impossible to reduce cost, the government is planning to expand housing colonies to the outskirts of the city and has imposed a limit on rent. Again, with freedom on individual human action, Kathmandu Valley experienced an easy urban shift.

If we track our evolution, solving our problems have often come from within the society – in the form of entrepreneurial ventures. Problems that arises within a society always brings along an economic opportunity and if we allow individuals to work freely, they would have enough incentive to come up with most appropriate and innovative solutions. Unlike the government authorities, it is not mandatory for free individuals to satisfy everyone in the society. Thus, they conduct small experiments and provide solutions to specific groups. Given the availability of millions of minds, such small experiments are conducted by thousands of individuals and even a few successful ones end up benefitting majority of individuals in the society. The beauty of this process is that even if the experiment fails, the society has nothing to lose as the entrepreneurs bear the entire risk of failure. However, it is a gradual and slow process which constantly evolves and adapts to dynamic changes in the society.

On the other hand, solutions provided by government authorities are simply a product of few minds imposing what they think is best for everyone, and has higher risk of failure. As government projects run on taxpayer's money, its failure often ends up risking the lives and fortunes of everyone. Many a times, the ineffective solutions imposed by the government have resulted in more chaos.

One of the most recent examples of the aforementioned argument is the development of ride sharing businesses like Tootle and Pathao in Nepal. While these companies were successful in eliminating the problem of crowded and ineffective public vehicles in Kathmandu and were able to create jobs for multitude of people, there was a time when they were banned in light of different issues like low sales of taxi service, protection of consumers from accident, legal barriers on private vehicles to provide public service, risked conflict, loss of jobs and loss of investment. More importantly, the problem of public transport remained.

The solution of the government for resolving the public vehicle problem in the valley was introducing Metro. However, the government failed to realize two things: (i) private ride sharing business could resolve the problem more efficiently, (ii) building Metro requires huge financing. Thus, instead of adapting to efficient and effective system, which could not only resolve the existing problem but also could enrich the lives of many people employed by the business, the government planning proposes wasting of taxpayers' money. Government intervention seems to be easy and attractive, but it is not prudent to always rely on it to resolve the many complex problems of human societies.

While saying so, it does not imply that spontaneous society is a perfect society. Human beings are prone to making mistakes. However, in a free society, they are also at liberty to come up with innovative solutions to the problems. The errors can be resolved gradually as the societies are ever evolving and many individuals are constantly in pursuance of resolving the problem. For instance, industrial revolution was a remarkable achievement which helped countries achieve prosperity and reduce mass poverty – at a scale that no government planned programs have ever been able to achieve. Nonetheless, if the photographs of the then industries are viewed, one can notice excessive smoke coming out of the industry or the industries polluting the environment in one way or the other. While industrial revolution solved the prominent problem of the time, it also created much damage to the environment. With realization of the same, people today have been sensitive about the environment and thus industries as well as individuals have started using environment friendly technologies.

Spontaneous order is not a perfect solution because human beings themselves are not perfect. Going back to the same example of the housing evolution of Kathmandu valley, many will readily point out today that in the process, Kathmandu valley lost in terms of its beauty. But these are privileges that we have today because the bigger problems were solved in the past. The enrichment of the human lives that was made possible due to spontaneous order also allows us to now invest in addressing these other problems of externalities.

De Soto's Lessons for Nepal

- Surath Giri

As the COVID-19 engulfed Nepal starting in March 2020, Nepal's already flailing economy took a serious hit. Needless to say, the pandemic has further exposed our broken economy. There is hardly an economy across the world that has not been affected by the pandemic. Some economies like that of Nepal, however, have been affected disproportionately. The countries where the informal economy is the predominant sector have witnessed a significant portion of the population fall back into the poverty line. Due to the restrictive measures adopted for the containment of the pandemic, the economies have come to a standstill. World Bank has reported that in the South Asian countries the economic disruption has been even visible from space with nighttime light intensity declining in more than three-quarters of South Asia's districts during the period between March and August 2020.[1]

The vulnerability to economic shocks in Nepal stems from two perennial problems of the Nepali economy – high unemployment rates and a high level of the informal economy.

Perennial Problems

It is estimated that over 400,000 youths enter the Nepali job market annually. Many of them do not get jobs, at least within the country. According to the Report on the Nepal Labor Force Survey 2017/18, 71.5 percent of the total population of Nepal is of working age (15+) and the current unemployment rate is around 11.4 percent. What is more concerning is that the unemployment rate is highest among young people aged 15-24 and 25-34 years.

As a result, labor migration has been a prominent source of employment opportunities for the Nepali workforce. In the FY 2019/20 alone, the Department of Foreign Employment issued 236,208 labor approvals to Nepali citizens seeking foreign employment which gives an inkling of labor migration volume. The trend had reached its peak in FY 2013/14 when 519,639 labor approvals were issued. The volume of labor migration to India through the land is expected to be several times this number although the exact records are not kept.

Secondly, the Nepali economy is predominantly informal. The majority of the employment opportunities are still in the agricultural sector or seasonal employment. According to the

1 https://openknowledge.worldbank.org/bitstream/handle/10986/34517/9781464816406.pdf

Nepal Labour Force Survey 2017/18, 62.2 percent of employments are in the informal sector which offers little to no social protection making the workers vulnerable to economic shocks like the pandemic. Similarly, the World Bank estimates that informal businesses make up around 50 percent of enterprises in Nepal.[2] Moreover, because of the very nature of the informal sector, there is little to no growth. The lack of growth of the enterprises in the informal sector means that the income of the workers engaged in those sectors does not rise enough to uplift them from the poverty line sustainably. They remain just an economic shock away from falling back into the poverty line.

To date, the government's response to high unemployment rates has been programmatic in nature. Two of the most renowned government initiatives in this regard, the Youth Self-Employment Fund, and the Prime Minister Employment Program are focusing on creating direct employment through government funds. The Youth Self-Employment Fund, for instance, has been able to create around 78,000 self-employed youths in its total 12 years of existence (around 6,500 annually)[3], which barely makes a dent when we have an estimated 400 thousand youth entering the labor force each year. These programs have been responding to the symptoms rather than the cause, i.e. why is not the economy creating more and decent jobs. One can also argue whether these programs will have any positive impact since they are merely transferring resources from taxpayers to certain groups of people rather than creating lasting solutions.

Therefore, the crux of the problem here is why is our economy, especially our informal economy not growing and therefore, not creating more and decent jobs. An economist and his crusade against violent insurgents from the other side of the globe may provide us some insights on this matter.

De Soto's Crusade

The socio-economic conditions of the Latin American nation Peru in the 1980s and of Nepal in the 1990s were comparable. Both the nations were facing widespread poverty, lackluster economic growth, and corruption that pervaded every sector of the governance and economy. And both the nations were grappling with a violent Maoist insurgency that had killed thousands of people, displaced many more, and brought the economy to a standstill.

Started in the 1970s, Sendero (The Shining Path), the Maoist insurgent group aimed to overthrow the government and establish a proletariat dictatorship it had termed the New Democracy. Starting in 1980 the group started violent warfare that included indiscriminate killings, assassinations, and bombings. Widely condemned for its brutality and violence against its opponents which included peasants, elected officials, intellectuals, journalists, judges, and even other Marxist groups, by the 1980s the group had killed thousands of Peruvians and displaced over 2 million of them. A million more were forced into voluntary displacement. Any kind of opposition or disagreement was bullied into silence and the establishment of the dictatorship of the proletariat was stated as the only means of achieving prosperity for the millions of poor Peruvians who as per the Shining Path were naturally disposed against markets and democracy.

Hernando De Soto, a prominent economist of

2 https://www.worldbank.org/en/news/press-release/2020/10/08/covid-19-impact-on-nepals-economy-hits-hardest-informal-sector

3 http://www.ysef.gov.np/employed-details.html

the country who had started a think tank called Institute for Liberty and Democracy (ILD) had different views though. Based on his research findings, he argued that the lack of property rights and access to legal protection for the poor are the root causes behind the poor being unable to prosper. He and his team carried out an elaborate study of the problems faced by the informal enterprises and the barriers that prevented them from growing and escaping the vicious cycle of poverty. He published his findings in his book, The Other Path: The Economic Answer to Terrorism with the title alluding to an alternative to the path taken by the Shining Path. The book argued that most Peruvians were not proletarians who were ready to rise against the business. They were instead small-scale entrepreneurs who were struggling in the informal sector because of a lack of access to the formal legal system. These entrepreneurs who had migrated from rural areas to cities in search of employment opportunities were engaged in micro, small, and medium enterprises and were working in the informal or in De Soto's word "extralegal" sector where they neither had access to formal property titles nor the legal protection required for their businesses to grow. Lack of formal property titles meant that the entrepreneurs did not have access to affordable finance because their assets could not be used as collateral. Additionally, these entrepreneurs in the extralegal sector were not a small or marginal sector of the then Peruvian economy.

De Soto's team carried out action research where they tried to set up a small garment enterprise outside of the city of Lima following all the rules and getting all the permits required by the law. They found out that it would take almost a year, 289 days[4], a period only very few entrepreneurs in the informal sector could afford to invest. And the cost of all this process? Over 1200 USD – 30 times the monthly minimum wage.[5] But this was just the tip of the iceberg, the team's subsequent research unearthed several examples that showed how the bureaucratic labyrinth made it impossible for small-scale entrepreneurs to achieve formality. Following are some of those examples:

- For an entrepreneur to get out of the street and build a formal retail market for food, it would take thirteen years to complete the legal and administrative requirements.
- It would take 26 months to operate a new bus route.
- It would take 21 years to build a legally recognized building on a wasteland.

The book went on to become a national and an international bestseller and its central arguments were picked up by the major media in the country. From tabloids publishing the summarized version of the book to television channels broadcasting the major arguments and findings of the book, De Soto's idea reached every nook and corner of the country and to the chagrin of the Shining Path were acknowledged and embraced by the policymakers as well as the target population.

The wide popularity of the book and De Soto's intellectual crusade against the violent prescription of the Shining Path led to a deadly attack against the Institute for Liberty and Democracy by the latter. On July 20, 1992, the Shining Path detonated a car bomb on the premises of the ILD killing 3 people and wounding 19 more.

4 https://www.ild.org.pe/ild-in-the-news/174-2015/1176-de-soto-recognized-by-the-world-bank-in-the-2017-doing-business-report

5 https://www.elibrary.imf.org/view/journals/023/0029/021/article-A005-en.xml

Despite this, De Soto's ideas of facilitating small-scale entrepreneurs to transition into the formal economy as a solution to poverty and unemployment were well-received not only by the Peruvian government but also received international attention, especially of the other similar developing countries. De Soto's prescription of simplifying legal and administrative hurdles to business, granting property titles to poor people, and providing legal protection to the informal businesses was absorbed enthusiastically by various developing nations of the world.

An International Problem

The labyrinth of legal and administrative hurdles that the general public, especially the micro and small entrepreneurs have to face are not endemic to Peru. The obstacles the poor across the world face while trying to enter the legal/ formal economy are daunting. The hurdles come not only in the form of cumbersome and costly legal and administrative requirements but also come in the form of anti-competitive practices which are often protected by the state such as the syndicates and cartels.

In his second, internationally-oriented book titled The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else, De Soto has unearthed shocking obstacles faced by entrepreneurs across the world.

For example, it was found that in Haiti, to get a lease on government land takes around two years. In the Philippines, formalizing an informal property in an urban area takes around 13 to 25 years and 168 steps need to be completed.

According to De Soto, such state of affairs has resulted in $9.3 trillion worth of 'dead capital', properties that are inhabited and being used primarily by the poor people but lacking the formal recognition and the potential use.

Ease of Doing Business

Subsequently, the hurdles to doing business and its impact on economic growth and employment have received considerable attention, especially by the World Bank which starting in 2002 has been publishing the Ease of Doing Business Index. Created jointly by Simeon Djankov, Michael Klein, and Caralee McLeish, three leading economists at the World Bank Group, the index ranks the countries covered by the index based on the ease of doing business in the country. Basically, the index measures whether business regulations are simple and accessible, whether contract enforcements are cost-effective and enforced, and whether property rights are protected and respected.

The Index has received considerable attention and success. Doing Business Report has been widely used by academics as well as policymakers around the world to reform their business environment. For example, the number of economies where it is possible to start a business in less than 20 days after fulfilling all the legal requirements has grown to 130 in 2016 as compared to just 41 economies in 2005.[6]

Rwanda is one of the stellar examples of countries that have taken their performance in the index seriously and have set out to improve their regulatory environment. Rwanda has managed to become one of the top reformers in the world having climbed up 112 positions from 150th position in the Doing Business Report of 2008 to 38th position in the Doing Business Report of 2020. Table 1 highlights some of the major reforms carried out in Rwanda in this regard.

6 https://www.ild.org.pe/ild-in-the-news/174-2015/1176-de-soto-recognized-by-the-world-bank-in-the-2017-doing-business-report

Table 1:
Doing Business Reforms by Rwanda

Starting a business: Reduced registration fees; made it possible to register a business online; consolidated name-checking, registration fee payment, tax registration, and company registration procedures; reduced time required to obtain a registration certificate; made the online registration one-stop-shop and streamlined post-registration procedures.

Registering a property: Replaced the 6% registration fee with a flat rate, regardless of the property value; created a centralized service in the tax authority to speed up the issuance of the certificate of good standing; eliminated the requirement to obtain a tax clearance certificate for property transfer and implemented the web-based Land Administration Information System for processing land transactions.

Getting credit: Strengthened its secured transactions system by allowing a wider range of assets to be used as collateral, permitting a general description of debts and obligations in the security agreement, allowing out-of-court enforcement of collateral, granting secured creditors absolute priority within the bankruptcy, and creating a new collateral registry.

Trading across borders: Expedited the acceptance of customs declarations; liberalized the warehouse services market; reduced the time for exporting and importing by extending the opening hours of customs points, implementing or improving electronic data interchange and risk-based inspection systems, and making improvements in the transport sector.

Enforcing contracts: Launched 3 commercial courts—in Kigali, in Northern Province, and Southern Province; implemented an electronic filing system for initial complaints; introduced an electronic case management system for judges and lawyers.

Source: https://www.doingbusiness.org/en/reforms/overview/economy/rwanda

Even complex economies have managed to achieve significant reforms in their business environments. Our southern neighbor India is another country that is making systematic efforts to improve its rankings in the Doing Business Report by reforming the regulatory environment. India has remained among the top ten improvers for the last three years and is currently placed at 63rd position in the report.

Nepal to date, however, has not done much to improve the performance in the Doing Business Report.

Nepal and the Doing Business Report

Nepal currently ranks 94th out of the 190 economies studied with an overall score of 63.2. This is the highest rank Nepal has achieved in the report to date and is a marginal improvement from its rank of 111th in 2008. The following table presents the ranking of Nepal in the various components of the Ease of Doing Business Index:

Component	Rank	Score
Starting a business	135	81.7
Dealing with construction permits	107	67.3
Getting electricity	135	60.9
Registering property	97	63.6
Getting credit	37	75
Protecting minority investors	79	58
Paying taxes	175	47.1
Trading across borders	60	85.1
Enforcing contracts	151	46.0
Resolving insolvency	87	47.2

Source: Doing Business Report 2020

If Nepal is to promote entrepreneurship, help small businesses in the informal sector grow, and create decent employment opportunities, it is imperative to improve the doing business environment. Currently, entrepreneurs have to pay thousands of rupees and spend weeks to just get their businesses registered. Moreover, the process and cost to shut down a company are prohibitively expensive and full of red tape. Contract enforcement, especially for small businesses is equally inaccessible and costly. There have, however, been some initiatives to streamline the regulatory process. For example, the Companies (First Amendment) Act, 2074 (2017) made a provision allowing companies that have been inoperative for years to shut down after paying a fee equivalent to 0.5 percent of their paid-up capital to the government. It was a welcome move. The provision was, however, made available only for two years since the commencement of the amended Act and made available to only companies that have not commenced business. The government has also set a roadmap to improve the investment climate . The initiative is yet to bring any significant change though. There have also been initiatives to digitalize the company registration process.

Despite these minor initiatives, the major policy thrust of the governments so far has been to create direct employment programs rather than improving the business environment. The immediate output of such programs which can be used for attracting voters could have been the motivation behind such programs. Not reforming the business environment is not an option though. Without reforming the business environment and making it easier for the general public to engage in entrepreneurship, unemployment, and lack of decent jobs are going to remain a perennial problem for Nepal.

Way Forward

Nepal should make improving the business environment a top priority in its economic plans. The Doing Business Report rankings can be used as a yardstick to measure the reforms. Similarly, while making the reforms, the perspectives of the most marginalized group of entrepreneurs should be taken into consideration. It is important to remember that a regulation that may sound reasonable and affordable for an entrepreneur from the city could be prohibitively expensive and burdensome for someone from the rural area. Additionally, while approaching the regulatory streamlining and reform, the policymakers should not think that they are making a compromise in a tug of war between them and the entrepreneurs. Moreover, as we can see from the experience of Rwanda, business environment reform is not a one-time event but rather an ongoing process. The simpler and the more accessible we can make them the better for the entrepreneurs. And finally, business environment reform, per se, should not be taken as a panacea for the economic problems for Nepal. Other economic reforms play an equally important role in contributing to the economic growth of the country.

Nepalese Agriculture: Time for a New Departure

- Ayushma Maharjan & Shreya Subedi

Background

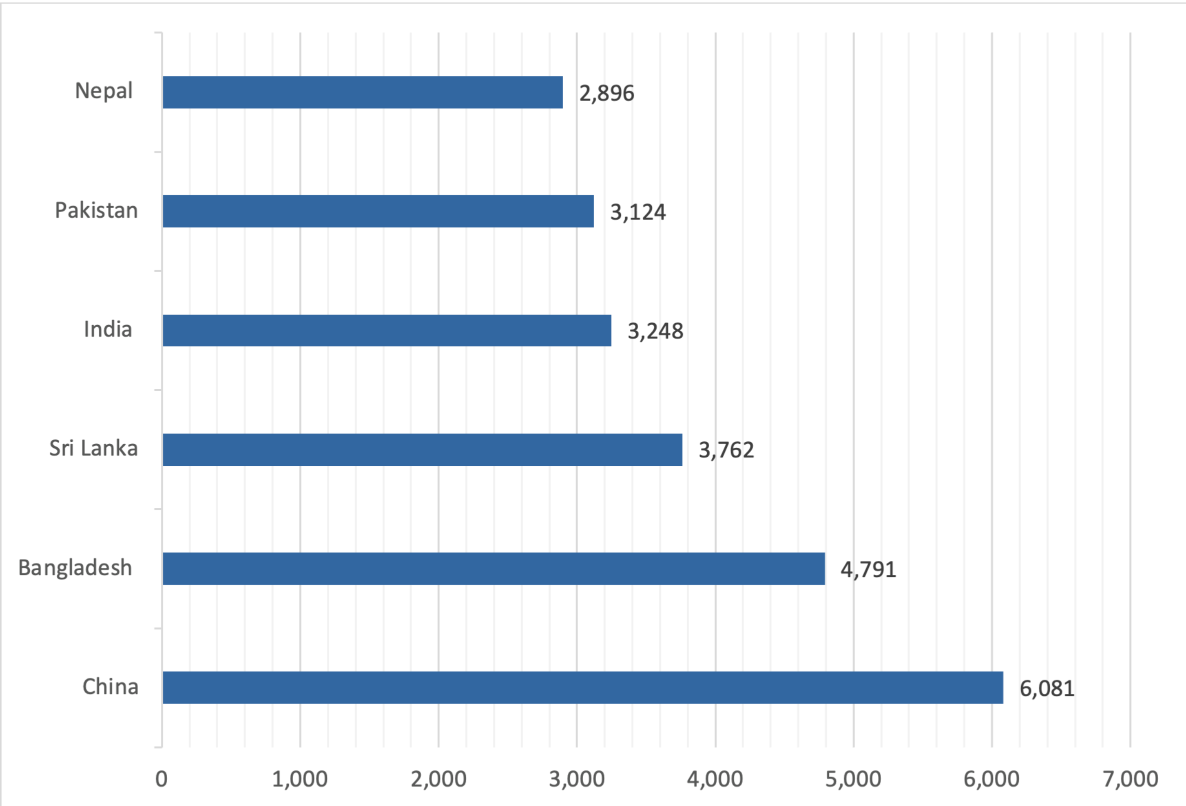
Agriculture sector is one of the dominant sectors of the Nepalese economy. As of 2011, 60.4 percent of people in Nepal were involved in agriculture. 21 percent of land in Nepal is used for cultivation. With a contribution of 25.83 percent to GDP, the prominence of the agriculture sector in the economy signals towards the need for conducive policies and intervention which can facilitate significant growth in the sector. Given the potential of a positive spillover effect, development in the agriculture sector can lead to growth in different economic sectors like industries and trade. Development of this sector has been given precedence in Nepal since the 1950s. Till date, it is viewed as a harbinger of employment, food security and prosperity.

In the past five years, on an average, NPR 37.94 billion has been allocated annually for carrying forth different plans and programs in the sector (Ministry of Finance, 2021). In FY 2021/22 alone, the government allocated NPR 45 billion for the same. The fund is utilized in implementation of a plethora of plans and programs and subsidy distribution aimed at increasing overall and crop specific agricultural production.

Despite the prioritization, sectoral performance of agriculture in the national economy is abysmal. In the past decade, the contribution of the agricultural sector to GDP declined by almost 10 percent, and the average annual growth of gross value added (GVA) was merely 3 percent (Central Bureau of Statistics, 2021). The average GVA of the manufacturing and service sector during the same period was 8.83 percent and 10.37 percent respectively. Likewise, the trade deficit in the agriculture sector also increased to 27.26 percent. Besides, in FY 2018/19, given the deteriorating condition of the agriculture sector, the government waived all loans of farmers which reflects the abysmal performance of past projects to help boost agriculture production and attain the desired goals of poverty alleviation (Ministry of Finance, 2019).

The underperformance of the sector is despite the initiation of plethora of agriculture development programs in the country. Nepal prioritized agriculture development since the fifth five-year plan in the 1970s. Since then, the country has witnessed different strategies and programs like the Agriculture Perspective Plan (APP), Agriculture Development Strategy (ADS), Nepal Trade Integration Strategy (NTIS), Prime Minister Agriculture Modernization Program (PMAMP), and several annual and five year plans, including crop specific programs. Despite the programs rooting for commercialization

Figure 1: Comparison of Cereal Crop Yield with Neighboring Countries



Source: World Bank, 2018

Currently, the performance of agriculture sector of Nepal is substandard as depicted by its low productivity when compared to the neighboring countries.

and modernization of agriculture to attain self-sufficiency, it is apparent that the very problems exist till date in Nepal.

The Inefficiencies of PMAMP

In FY 2016/17 Nepal initiated PMAMP with the aim to increase agriculture productivity and attain self-sufficiency in crop and livestock within a decade. The major plans of the project included expanding agricultural zones, and providing cash grant, subsidies, and technical assistance to the farmers.

While a total of approximately NPR 41 billion has been allocated for the program in the past five years, the program has hardly been able to achieve any results. Till date, the government has been able to spend only 48 percent of the allocated budget due to constraints in implementation which includes lack of coordination, lack of human resources, inefficient use of resources and other organizational constraints. Additionally, the program neglected the past failures of distributive and grant based agriculture projects which was reflected in an internal review by project officials which stated that politicization was rampant in the program, such that, the targeted groups were unable to get the intended benefits. It also disregarded the federal governance structure and mostly relied on centralist approach.

Consequently, the program has not been able to achieve its targets. For instance, one of its major targets was to attain self-sufficiency in wheat and vegetable within one year, rice and potato within two years, and maize within three years. However, after five years of its implementation, Nepal has only experienced a rise in import of the mentioned crops with cereal imports reaching as high as NPR 17 billion in FY 2020/21.

The failure of agricultural programs to attain desired results are mostly attributable to:

- the existence of countless inconsistent programs and the perplexities in its implementation,
- overarching but unattainable goals,
- one-size-fits-all nature of programs
- failure to create a linkage between the goals and comparative advantage and capacity of Nepalese agriculture, and
- lack of research and development and adequate discussions while building the programs

Apart from the aforementioned, Nepal has witnessed the introduction of populist rather than practical agriculture programs annually. These programs have absorbed a lot of financial resources of the country without any significant return or realization of tangible benefits for farmers.

The lackluster performance of the existing programs indicates a need for Nepal to revise the current programs and concentrate its effort in areas that Nepal could truly benefit from. For instance, Nepal Trade Integration Strategy (NTIS) 2016 has listed potential agricultural products that Nepal could benefit immensely from exporting (MoICS, 2016). However, Nepal has not paid much attention to leveraging the same. In fact, Nepal has been concentrating much of its resources and energy to attain self-sufficiency in cereal crops - which is practically impossible given the low yield and high international competition. Thus, shifting focus from cereal crop production to facilitating growth of high-value crops, agriculture export, and processing industry by rethinking the current strategies would help Nepal unleash the potential opportunities and growth in the agricultural sector.

Shifting from Cereal Crop to High Value Cash Crop

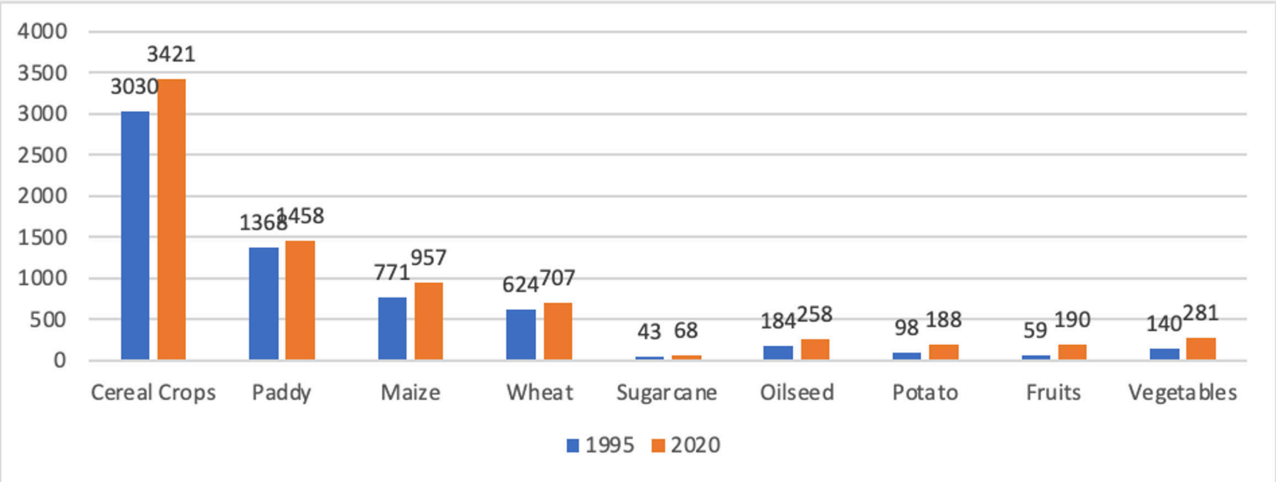
The agricultural production in Nepal is mostly dominated by cereal crops which comprises 37.58 percent of agricultural GDP in Nepal. Promotion of cereal crop production has received much limelight in the past decades, as it is considered vital for ensuring food security in the country. With regards to the same, Nepal has dedicated numerous plans, programs, and policies to increasing productivity of staple crops like rice, wheat, maize, millet, among others.

Paddy (rice), wheat, and maize are the three most prominent crops produced in Nepal which represent about 15.35 percent, 8.85 percent, and 6.34 percent of Agricultural GDP (AGDP) respectively in the country (MoALD, 2021). It also occupies the highest portion of cultivated agricultural land.

Despite the concentration of resources towards enhancing cereal crop production in Nepal, the sector has not demonstrated itself to be promising for the future of Nepalese agriculture. The desired goal of food security attained through self-sufficiency continues to remain unfulfilled. The 76th rank of Nepal amongst 135 countries as reported by Global Hunger Index (GHI) portrays that the growth in agriculture has failed to keep pace with the increasing demand for food. In 2015, it was reported that 32 out of the then 75 districts in the country were food deficient.

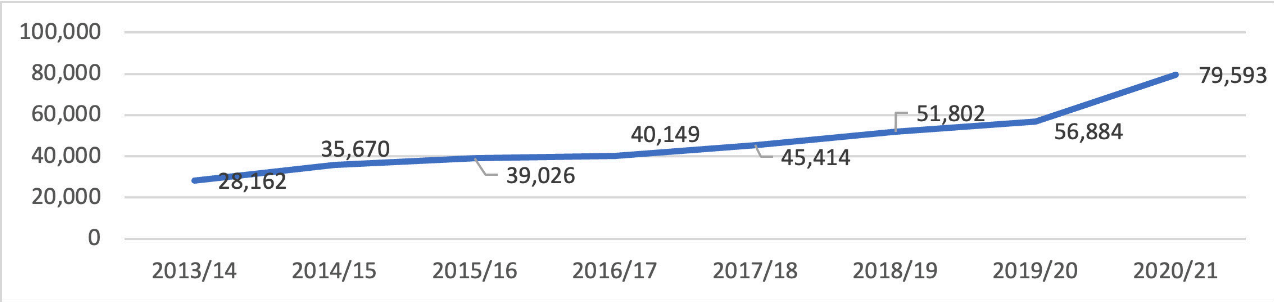
Consequently, the cereal import of Nepal has increased dramatically, especially after 2009. As reported by Sharma (2019) between 2009 and 2013 alone, the import of rice, maize, and wheat increased by 39 percent, 26 percent, and 126 percent per annum respectively. The import of cereal crops in Nepal continues to grow till date, which is one of the major causes of rising trade deficit in the agricultural sector of the country.

Figure 2: Total Cultivated Agriculture Land Area Under Major Crops in 000 hectare



Source: Statistical Information on Nepalese Agriculture, MoALD, 2020

Figure 3: Import of Cereal Crops in Nepal
(NPR million)

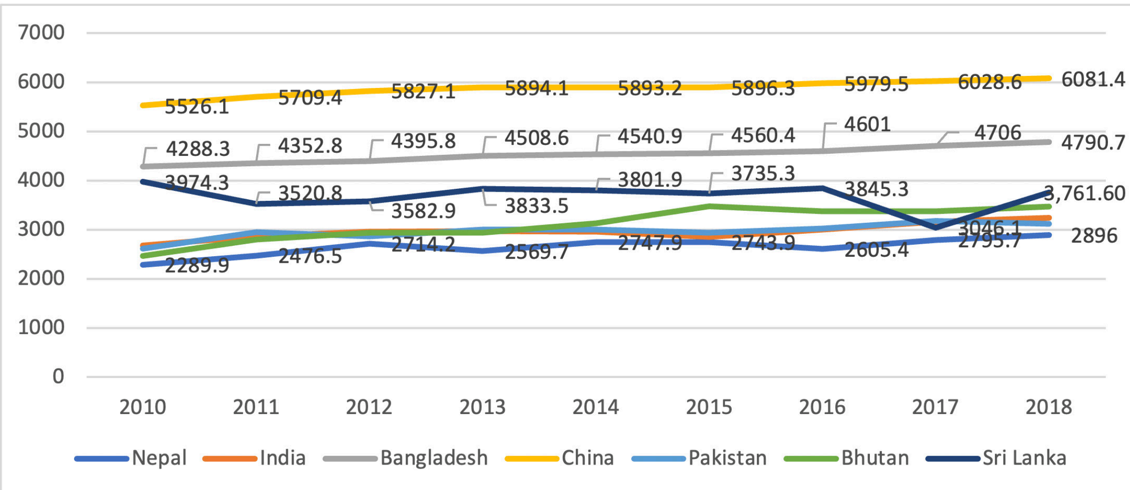


Source: Nepal Trade Information Portal (2014 – 2021), Trade and Export Promotion Center

The import figures of cereal crops in Nepal has grown exponentially from the 2000s. In FY 2021, Nepal imported 1 million ton rice worth NPR. 50.48 billion, which was a 51.4 percent increase from the previous year. The import of rice as a percentage of domestic production is approximately 18 percent. The figure was 14 percent in FY 2013 (Giri, et al. 2017). In their research Giri, et al. (2017) suggested that Nepal needs to increase rice production up to 14 percent in order to attain self-sufficiency in the sector. However, it has been reported that Nepal has lost an estimated 100,000 hectare of agricultural land dedicated to paddy cultivation.

Additionally, crop situation update as reported by Food and Agriculture Organization of United Nations (FAO), Government of Nepal and World Food Program (WFP) (2016) show that total production of summer crops (paddy, maize, millet and buckwheat) was estimated to decrease by 5.63 percent compared to 2014/15 and by 5.3 percent compared to the preceding five-year average. The production of paddy alone decreased by 9.95 percent compared to the five-year average and decreased by 10.22 percent compared to 2014/15.

Figure 4: Cereal Yield per Hectare in Neighboring Countries



Source: World Bank

This scenario is attributable to the poor performance of cereal crop production in Nepal. The import figures and declining use of agricultural land in cereal crop production portray that it is more affordable and easy to import such products. This is evidenced by the fact that Nepal's performance in cereal production is poorest when compared to its neighbors.

Despite the appalling performance, the allocation of excessive resources in cereal crop production has barred Nepal from leveraging benefits by producing other high value cash crops which have high export potential in the international market.

producing paddy, maize, and wheat whilst using the land to produce more of high value agricultural products, the agricultural GDP of Nepal could grow exponentially. In other words, Nepal would economically benefit by replacing cereal crops with high value crops.

The shift from cereal crops to high value cash crops would also help Nepal unleash new opportunities in the agricultural sector that have been witnessed due to consumption of food patterns to high value products like meat, fish, egg, fruits, and vegetables. One positive aspect is that the high value commodities have experienced faster growth when compared to cereal crops in Nepal, and today Nepal is self-sufficient in dairy and egg. The shift would thus generate opportunities for farmers, including small and marginal, to increase their income level.

Table 1: Area of Production and Total Contribution to GDP (Cereal Crops vs. High Value Cash Crops)

Crop	Area of Production (000 hectare)	Contribution to GDP (percentage)	Hypothetical Scenario	
			Area of Production	Contribution to GDP
Paddy	1458	15.35	1458	15.35
Maize	957	8.85	1458	13.48
Wheat	707	6.34	1458	13.07
Vegetable	281	11.92	1458	61.84
Potato	188	5.96	1458	46.22
Ginger (raw)	235	1.88	1458	11.67
Sugarcane	68	1.81	1458	38.81
Lentil	212.8	1.71	1458	11.71
Cardamom and Nutmeg	16.5	0.37	1458	33.72
Tea	16.9	0.15	1458	12.94

Source: Selected Indicators of Nepalese Agriculture (pocket book), MoALD, 2021

The above table portrays the total contribution to GDP of major cereal and cash crops in Nepal against the area utilized in its production. The table reflects that despite fewer land dedicated to production of vegetables, potato, sugarcane, cardamom, among others their contribution to GDP is relatively significant. This implies that, given the scenario whereby Nepal stops

However, given the backwardness of Nepal when compared to its Asian counterparts in agricultural development, Nepal needs to devise a comprehensive strategy to help the country take a significant leap in development of agriculture from traditional, subsistence farming, and cereal crop production to modern, commercial and high value crop production.

Recommendations

1. Shift from cereal crop production to high value cash crop production

International Food Policy Research Institute (2019) published a paper 'Agriculture Development in CAREC Member Countries: Review of Trends, Challenges, and Opportunities' which highlighted that, 11 member countries[1] of Central Asia Regional Economic Cooperation (CAREC) undertook significant institutional reform that shifted its policy priority from food security to diversification strategy towards high value agriculture. The institutional reform not only helped the countries to promote market-oriented agriculture but also contributed to significant improvements in their respective agricultural sectors.

In order to compete in the world market, Nepal should also venture into transforming its agriculture sector towards high value crop production, which would not only allow farming households to earn higher income but also facilitate economic growth of the entire country. For the same, Boettiger, Denis, and Sanghvi (2017) have highlighted strategies that countries can adopt to ensure successful transformation to high value agriculture. The recommendations are discussed below:

Improve the quality of national plan or agriculture strategy

Agriculture transformations have failed to succeed in countries that have complex and broad plans or strategies that try to overachieve by covering every aspect that could contribute to some developments. Plans that have specific targets that are crop specific or are geographically specific have worked better.

Thus, Nepal needs to develop an agriculture transformation strategy that differentially targets crops and geographies by introducing tailored programs. Additionally, while introducing such a strategy the policy makers need to understand the importance of trade offs - distributing resources to both cereal crop production and high value crops might not be the best viable option and Nepal might have to leave one behind.

Since the establishment of Agriculture Perspective Plan (APP) in 1995, Nepal has witnessed initiation of a plethora of agriculture specific plans and programs. Currently, some of the active agriculture sector programs include Agriculture Development Strategy (ADS) (2015 - 2035), Prime Minister Agriculture Modernization Program (PMAMP), Nepal Trade Integration Strategy, among others. However, none of the strategies and plans have generated desired results. Some of the major problems behind the scenario is that the programs are overly ambitious, cover too many value chains and fail to prioritize specific resources and sectors. Additionally, the plans are inconsistent to one another and thus fail to set clear goals. The focus on almost all types of goals from ensuring food security to exporting high value products are not integrated and compete with one another, which is likely to enhance the chances of underdelivery. Additionally, the budget speech of different years in Nepal portrays the lack of clarity from the government's perspective as the priority strategy changes every year. For instance, plans and programs of FY 2018/19 focused

1 Afghanistan, China, Uzbekistan, Pakistan, Tajikistan, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Mongolia, Turkmenistan

on export promotion and boosting agriculture processing industries as envisioned by ADS, however, subsequent plans and programs have shifted the focus towards achieving food sufficiency under PMAMP.

Nepal thus needs to build a comprehensive and attainable strategy with specific goals. Additionally, crop specific and geography specific plans and implementation strategies should also be built, which can be tracked by respective local units. One-size-fits-all model in agriculture will not help attain significant progress in the sector.

Identification and Mobilization of Change Agent

Creating a shift from cereal crop production to high-value crop production would require encouraging millions of farmers spread across the country to change their farming practices swiftly and effectively. For the same, a number of factors come into play like willingness of the farmer, risk, investment, market, and infrastructure. The factor might vary depending on the crop involved, geographic location, culture among others. Thus, identification of the same and selecting appropriate change agents is critical.

Change agents can be spread across different sectors from farm experts, financial experts, animal health experts, among others. However, a common attribute of all change agents are that they are such individuals that the local farmers trust and thus would readily be motivated by the individuals' proposal of modifying agricultural practices. At the same time, the change agent should also be able to practically help the farmers shift their agricultural practices from seed procurement to marketing. According to Boettiger, Denis, and Sanghvi (2017), change agents can help farmers make the transition from growing cereal crops to more complicated and high value crops. Countries like Morocco, and India have established offices at local units that focus on successful transformation of rural agriculture, where the officers visit the farmlands and talk to farmers and help address their problems wherever possible. It has become one of the widely popular delivery mechanisms of governments to bring on the ground impact.

Parallel Developments

Developing an agricultural system requires focus on multiple cross-cutting issues from reforming hundreds of policies to making investment in multiple sectors from infrastructure to value chain development. Some of the fundamental issues that Nepal needs to swiftly address are pertaining to infrastructure, seed and fertilizer, entering international markets, and providing farmers greater access to finance.

For the same, Nepal needs to amend restrictive and complex laws related to agriculture. One of the most important ones is to allow Foreign Direct Investment (FDI) in the sector to ensure higher investment in the area. Likewise, Nepal has recently announced that private sector participants can engage in production, import and distribution of fertilizers and seeds - which was previously under the control of the government. However, the same should be amended in legal documents as well as a sense of stability should be provided to the private sector.

Continuation of investments in building agriculture roads, storage facilities, warehouses, and markets should also be a priority. At the same time, in order to enable smooth transformation, the government needs to coordinate its efforts with the many players in the market like civil society and private sector to encourage greater private sector engagement.

High Value Agriculture Project in Hill and Mountain Areas

In 2011, Nepal implemented the High Value Agriculture Project in Hill and Mountain Areas which was co-financed by the International Fund for Agricultural Development (IFAD), the Government of Nepal (GoN), and the SNV Netherlands Development Organization. The project aimed at reducing rural poverty and social inequality in challenging rural hilly areas of Nepal through developing high value agriculture value chains and markets to improve their income and develop the ability to respond to market dynamics. The project was executed by Ministry of Agriculture and Livestock Development (MoALD) with implementing partners such as Netherlands Development Organization (SNV) , Agro- Enterprise Center (AEC) of FNCCI District based partners, selected national/local NGOs; district agricultural development offices (DADOs); agribusinesses; producers' groups; and cooperatives.

The project leveraged the demand of the private sector for 18 high value crops and livestock which were not well processed or marketed. Targeting through existing and new producer organizations (POs) which engaged local marginalized farmers the project strengthened farmers skills and capacity to produce market-oriented high value agriculture commodities, strengthened their access to market, output market and service market. The project involved the local people and worked on improving producer organization and establishing contractual agreement with local traders for supply of farm input and agri-business for sale of crops and livestock. In order to enhance the capacity of targeted beneficiaries the project provided training on credit mobilization and business literacy to farmers, traders and agribusiness. Through its unique feature of inclusive value chain development and strengthening of agriculture service delivery the project trained 456 POs reached a total of 107,860 beneficiaries and increased their total income per year by 37 percent. Through a 7 year project period the project reduced poverty in the region by 8 percent, increased asset growth of productive assets by 6.5%, increased income through increase in crop income by 49.9% and livestock income through 92.9% along with better market access. The project was able to create such a vast impact through its focused approach on a concentrated small number of interlinked value chains and focused work with a small and cohesive group of farmers that allowed monitoring of activities and accommodating needs. This along with a mixed approach of top-down approach and bottom up approach for linking traders, government agencies, commerce and finance departments, and scientists to address the absence of product and input markets, marketing facilities, credit, and policy support.

Source: Selected Indicators of Nepalese Agriculture (pocket book), MoALD, 2021

2. Ensure Food Security through Bilateral Trade Agreement

Nepal while venturing into export-based high value crop oriented agriculture must also build strategies in ensuring food security in the country. While the option is to import cereal crops from surrounding countries at prices cheaper than those produced in Nepal, Nepal can still leverage bilateral agreements amongst different nations to ensure continuous supply of staple food.

Indonesia, for example, in February 2020, signed the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA) which implies that goods including agriculture from Australia will get preferential access into Indonesia and vice versa. Indonesia has agreed to:

i. provide a market of 500,000 tons of wheat, sorghum and barley each year, increasing at five percent per annum,

ii. eliminate outstanding tariffs on most cereals and grains,

iii. reduce tariffs on oats, fruits, nuts, vegetables and animal products.

iv. Meanwhile, indonesia has shifted its focus towards export of items like palm oil, rubber, coconut oil and its other advantageous sector and at the same time has enhanced food security in its nation

Rethinking Subsidy

Agricultural subsidy is one of the oldest programs in Nepal which has endured for more than four decades. It is reported that annually approximately NPR. 18 billion is directed towards subsidizing different segments of the sector - seeds and fertilizers, agriculture insurance, interest on agriculture loans, modern tools and equipment, and grants for agri-business.

Despite the concentration of a significant amount of the agriculture budget towards subsidies, the results generated are abysmal. The most apparent problem in the sector is the weak governance that has instigated challenges attributable to frequent misutilization of funds by both bureaucrats as well as the farmers.

Given the distribution of subsidies under a plethora of sub-sectors in agriculture, the figures portraying the accurate subsidy amount in the federal budget is not easily accessible. The mere fact provides ample room for the government to counterfeit the program budget. Consequently, misutilization of subsidies is entrenched in the agriculture sector of Nepal.

The subsidy programs were introduced with the intention to help small and marginal farmers to earn decent livelihood and climb out of poverty. However, numerous reports and news have revealed that small and marginal farmers have limited to no access to subsidies. From fertilizers to modern tools and technology, to loans on agri-business are often granted to large farmers or those with political influence. On the other hand, small and marginal farmers depend on traditional tools and high-priced fertilizers imported from informal markets. This undue support to large farms has ensued greater disadvantage to the small farmers.

Additionally, the funds granted on the basis of favoritism has failed to generate the desired results. It has been witnessed that the funds are not invested in productive uses. For instance, in Pyuthan Municipality of Lumbini Province, NPR. 400,000 was granted for the purpose of pig farming. However, it was reported that the grant money was never used for pig farming but was directed towards a private Resort. Such occurrences are quite frequent[2] throughout Nepal.

2 For more information read 'Why agricultural subsidies have failed to benefit needy farmers' available at https://kathmandupost.com/29/2020/02/20/why-agricultural-subsidies-have-failed-to-benefit-needy-farmers

Despite the recurrent misuse, the government has not used prudence in allocating subsidy budgets.

In order to control such fraudulent practices, Nepal introduced Subsidy Management Procedure 2019. However, its efficacy is questionable as, three years down the line, the improper use of subsidy is still widespread.

Thus, Nepal needs to rethink its subsidy distribution strategy, such that the adopted measure will not only generate preferred results but also will help mitigate the fraudulent practices in the sector.

Recommendation

It is high time for Nepal to rethink its current subsidy program. Some of the strategies - based on academic studies pertaining to agriculture subsidy in Nepal and successful international subsidy programs – that Nepal can adopt are discussed below:

1. Transparency

Ensuring transparency in subsidy allocation is one of the key steps towards controlling corrupt practices in the sector. For the same, all three tiers of government in Nepal need to publicly disclose the total amount of agriculture subsidy and its allocation on different programs. Readily available information on the same can increase civic awareness which would act as a tool to hold the respective government and implementers accountable.

2. Interest based subsidy over grant

It has been identified that interest-based subsidies[3] are more effective than grants. Interest based subsidies are those subsidies that are provided to the target group in the form of loans at subsidized interest rate. This method helps to curb fraudulent practices arising from both the bureaucracy as well as the beneficiary. Given the requirement to pay back the interest amount in some future stipulated time, the beneficiaries cannot misuse the subsidy and need to diligently work towards attaining the desired goals. The beneficiaries ensure that the loan amount is used judiciously such that it would help generate higher income in the future, thus increasing agricultural activity as well as productivity. Also, given the distribution of such subsidies through bank and financial institutions (BFIs), it is difficult to exploit the same for any other use.

3. Sales-based Subsidy Program/ Output-based Subsidy Program

As per the current practices, Nepal distributes subsidy to the beneficiaries prior to the initiation of a program. For instance, subsidy for agricultural equipment is distributed without any prior commitment towards productivity. Such practice has often led towards misutilization of agricultural funds. In some instances, despite using subsidy for purchasing agricultural equipment, desired results could not be generated as the beneficiaries were unable to use the equipment due to lack of technical knowledge.

Thus, Nepal should shift towards providing sales-based subsidy or output-based subsidy over direct subsidies. In such a scenario, the beneficiaries can accumulate capital from cooperatives or from BFIs and commence their production activities. After a desired level of output or sales is reached, the beneficiaries can redeem the capital from government in the form of subsidy. Such practice ensures the attainment of desired level of productivity and growth and limits the chances of fund misutilization. One

3 The study was conducted by MoALD in 2019 by a committee led by Tej Bahadur Subedi, then Joint Secretary at MoALD

such program deemed exceptionally successful was conducted by Heifer Nepal[4].

Sales- based subsidy program by Heifer Nepal

Heifer Nepal's Sales-based subsidy program remunerates farmers through grants based on their sales figures. This new approach applied by Heifer Nepal has incentivized farmers towards better production, increased competition and improved food security. In this approach Heifer Nepal collaborates with local municipality leaders to manage grants through cooperatives, mostly women- led. Small scale farmers who are involved with the cooperatives are trained in diligent record keeping of their livestock and sales to improve their accounting skills as well as to make them eligible for public subsidy. These farmers are then remunerated by the cooperatives on the basis of their sales after an auditing process. Till date Heifer Nepal has collaborated with 24 municipalities to disburse approximately NPR 30 million (USD 273,000) through fifty farmer owned businesses. Heifer Nepal is currently working with 30 municipalities to expand the model and the government of Nepal has set aside approximately NPR 800 million (USD 7.5 million) for future investment of the project in 25 municipalities.

This approach has also helped small scale farmers grow their agribusiness and earn income. The training on bookkeeping and record keeping has also encouraged farmers to adopt formal bookkeeping practices, and has motivated residents to take up agriculture based entrepreneurship. According to a farmer this provision of subsidy through cooperatives based on their sales has been a great motivating factor for their work. The same farmer has earned $5,800 through sales and through the grants.

Nepal can replicate similar models throughout the country.

4. Indirect Subsidy

The government of Nepal can also provide indirect agricultural subsidy to the farmers and agriculture enterprises. Instead of directly providing grants to the beneficiaries, this method diverts the capital in infrastructure and other relevant developments that would ensure greater productivity, market access, and sales, or reduces price of products that would reduce the cost of production of goods. One sector whereby the government can channel the subsidy money is in quality testing lab and certification that would increase the value and salability of the product in both domestic and international market. Likewise, price reduction in electricity for agriculture processing units, customs reduction in agricultural equipment including tractor, reduction of taxes in land, improvement in storage services, improvement in agriculture transportation, are some areas that would indirectly provide high benefits to the farmers.

Neighboring India spends about 2 percent of the GDP on indirect subsidies and utilizes the fund on irrigation subsidy, power subsidy, credit subsidy, and farmer education (Union Public Service Commission, 2020).

Export Promotion

In FY 2021, the import of agriculture goods in Nepal reached approximately NPR 325.29 billion, a stark increase of more than 30 percent. The share of agriculture products in the import bill witnessed a drastic rise to 21 percent. On the contrary, the export of agricultural products was merely NPR 46.30 billion, a fall from NPR 55.19 billion in FY 2019/20 (Ministry of Finance, 2021).

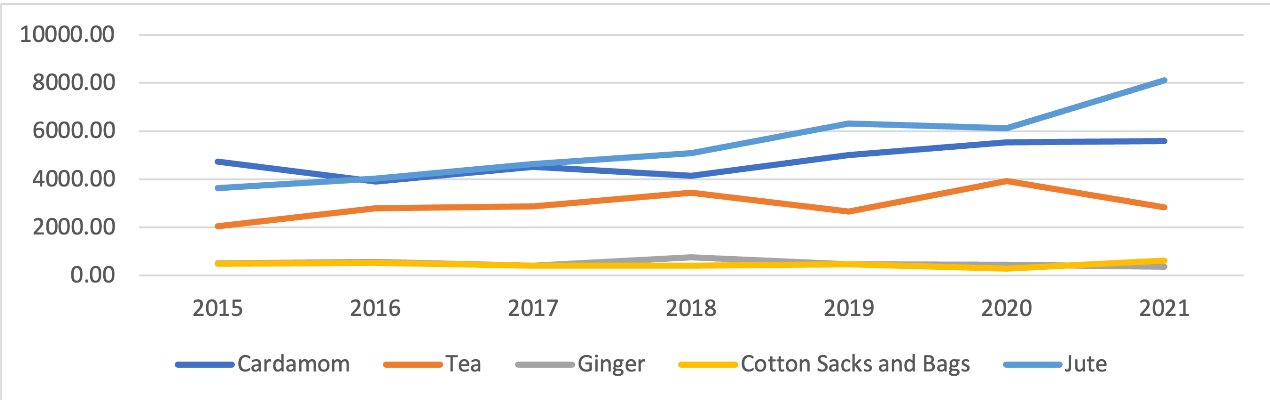
4 For more information read 'Subsidy Success Holds Promise for Nepalli Farmers' by Knight (2021) available at https://www.heifer.org/blog/subsidy-sucess-holds-promise-for-nepali-farmers.html

The inability of Nepal to increase its agricultural export is highly attributable to the fact that while Nepal's comparative advantage lies in high value cash crops, the agriculture sector is dominated by cereal crops. Since the formulation of APP in 1995 till date, majority of programs introduced for the agricultural sector is targeted at cereal crops. While the per capita expenditure on agricultural products has increased by 80% in the past two decades, its productivity is insufficient to meet the domestic demand itself and exporting the same is a far fledged dream.

The current focus of effort and resources towards the less lucrative cereal crops is hindering the usage of agricultural resources in the most optimal manner. It has been witnessed that the trade-off between the production and marketing of cereal crop and high-value crops in Nepal is high. For instance, Nepal has comparative advantage in ginger and cardamom – the second and fourth most traded spices in the world. However, given the lack of priority in such sub-sectors, Nepal experienced an abrupt fall in ginger exports from being the top 5 exporter[5] in the world market prior to 2013/14 to 17th top exporter in 2019. While Nepal remains amongst the top 20 ginger exporters and top 5[6] cardamom exporters, the inability to divert attention and policy to these sectors might result in Nepal losing these key markets.

Nepal has a comparative advantage on production of high value cash crops, mainly jute, cotton, tea, cardamom, medicinal herbs, and ginger. These crops also have huge export potential and account for majority of agricultural exports.

Figure 5: Export Trend of Major High Value Crops in Nepal



Source: Nepal Trade Information Portal, Trade and Export Promotion Center

5 http://www.tepc.gov.np/tepc_pub/2017_Ginger%20Factsheet.pdf
6 https://moics.gov.np/public/uploads/shares/strategy/Large_Cardamom_1508652892_compressed.pdf

Table 2 Export Trend of Major High Value Crops in Nepal

Product	2015	2016	2017	2018	2019	2020	2021
Cardamom	4725.28	3902.06	4515.25	4136.85	5001.56	5532.86	5579.40
Tea	2046.12	2787.12	2874.81	3439.75	2660.27	3919.61	2843.47
Ginger	499.66	561.19	413.87	764.96	471.72	457.02	374.79
Cotton Sacks and Bags	483.50	521.08	420.92	413.31	464.91	283.48	630.00
Jute	3628.01	4027.58	4635.71	5078.32	6313.01	6123.24	8113.74

Source: Nepal Trade Information Portal, Trade and Export Promotion Center

The above figure depicts the inability of Nepal to realize steady and stable growth in export of these sectors. While the potential to export these items remain high, substantial effort towards ensuring the same is absent. World Bank (2019) published a report, 'Enabling Business of Agriculture' which depicted that Nepal scores merely 48.97 points out of hundred implying that the government has not made it easier for Nepali farmers to operate their business.

Export of Nepali agricultural products indeed adhere to many drawbacks.

Firstly, the agricultural products of Nepal are incompetent in terms of quality and price when compared to that of foreign countries. While factors like use of advanced technology, considerable economies of sale and government subsidies in foreign nation has abridged Nepal's potential to export cheaper agricultural products, quality of the products have been undermined due to unavailability of quality testing, standardization, and certification services in the country, making products less competitive in the global market.

For instance, in FY 2019/20 the price of both Crush, Tear Curl (CTC) and Orthodox Tea decreased substantially by almost 50%, leading to a fall in tea export by 24 percent due to inability of farmers and industries to even break-even. This decrease was attributed to the lack of institutions that provided organic certification to the tea produced in Nepal, which made farmers reluctant to trade in price determined by Indian traders which was significantly lower than the true value of the tea. Nepal also experienced significant barrier in ginger export as the shipment was blocked citing adulteration and chemical residue along with the order to obtain a separate license for the import authority, increasing the cost of trading ginger. Likewise, in the case of cardamom, it is mandatory for Nepali exporters to get a certificate from Indian laboratory prior to exporting. These certification process requires exporters to visit Indian border with numerous documents every 6 to 1 year for renewal. The entire process has certainly added the burden and cost of exporting cardamom to India.

While Nepal already has a lower hand in the international competitiveness, complexities in the form of export compliance have made it more difficult for Nepalese farmers to supply products in the international markets at lower rates. The exporters of agricultural products must issue a phytosanitary certificate prior to exporting. In the case of Nepal, exporters have to physically visit the Ministry of Agriculture and Livestock Development (MoALD) to issue a phytosanitary certificate which includes excessive bureaucratic compliance. According to World Bank (2019), it takes an exporter 48 hours (which is equivalent to 6 working days)[7] to obtain agriculture specific export documents. Nepal scored 4 out of 7 in the trading food index which measures points on license and membership requirements and phytosanitary certification procedures. In majority countries the time required to meet export compliance is 24 hours and in most European and other developed nations, it is less than 1 hour.

Another major setback in agriculture export is the lack of adequate research and development services that not only identify new and exportable products but also analyze the market trends in the international market. Many countries leverage research laboratories to build quality agriculture products at less cost. If Nepal fails to keep up with the development, agriculture export will face a significant downfall. For instance, in the case of large cardamom, countries like Guatemala, China, Pakistan and Vietnam have leveraged their research and development skills to create a modified black cardamom with similar taste and feel at lower cost. This has declined the export of Nepali cardamom in the global market, especially Pakistan, the largest importer.

While Nepal is a member of World Trade Organization (WTO) and the South Asian Free Trade Area (SAFTA), the country has not been able to leverage the same[8] to realize greater benefits. One of the major hinderance is the presence of plethora of agreements with different and often conflicting compliance. Nepali exporters are unaware of the existence of such a variety of agreements and the rules and requirements pertaining to the same. As a result, Nepal still faces non-tariff barriers while exporting products.

Recommendations

1. Quality Testing Laboratory and Certification

Investment on quality testing laboratory is of utmost importance for Nepal to produce quality agricultural products that have potential to compete in the international market. Nepal also needs to invest in certification agencies and establish credibility in both domestic and international market and expand the reach of certification and standard testing measures. One way to achieve the same can be to permit private sector to open certification agencies, who can establish such organizations in collaboration with foreign companies.

2. Digitalization of Export Compliance Process

It is apparent that Nepal needs to introduce measures to improve its export procedure. One of the most effective method applied by different developing and developed nation is to digitalize the export procedure. Countries like Bangladesh and Dominican Republic have made their trading process easier by publishing certificate fees online and introducing online applications for phytosanitary certificates. Nepal can take an example and digitalize its process of applying and submitting quality test certificates online, this can reduce the cost and time for an exporter to obtain certification for export.

7 Calculated by considering 8 working hour per day

8 Nepal has seventeen trade agreements; two transit treaties with India and Bangladesh; and a transit treaty with China. Other than Asian nations it has trade agreements with the EU for duty free and quota free export in certain items.

3. Trade Agreements

Nepal exports the majority of its agricultural products to India, due to the presence of trade agreements Nepal does not have to pay high tariffs for export. While exporting to India is a good possibility for Nepal, it should start developing a market chain with other countries that can provide them with higher economic return on export. For instance, in terms of cardamom Nepal can make direct arrangements with major importers like Pakistan instead of providing India an opportunity to act as a middleman. It would be beneficial for both Nepal and the importing country.

Nepal can also work towards simplifying and harmonizing trade agreements with multiple countries. The agreement should consist of measures to avoid tariff and non-tariff barriers in cross border trade. The issues on taxes on imports have important implications for the trade negotiators as the policies must not only include the frameworks on the matters of reducing custom duty, the agreement has to also eliminate or substantially reduce the para-tariffs so that a level playing field is created. Likewise, a major step in tapping the lucrative market for Nepali products could be with a trade agreement that eliminates or substantially reduces the tariffs and para-tariffs levied on meticulously chosen potential Nepali exports and committing to address the major non-tariff barriers.

4. Research and Development

Nepal Agriculture Research Council (NARC), as an institution, focuses mostly on cereal crops. Due to the ineffectiveness of NARC and lack of participation from Nepal's Agriculture University, it is necessary to increase the participation of private sector research on agricultural products. To this end, several agricultural research funds (ARF) have been established, often with substantial World Bank contributions, for example, in some African countries such as Kenya, Tanzania, Ghana, and more recently Cameroon. They offer opportunities to different agencies, in the private and public sector, to propose research programs and to bid for the public funds available to finance approved programs.

Nepal can also work towards promoting joint ventures with international companies so that it enables technology transfer to domestic companies thereby capacitating them to lead major projects in the future.

5. Development of Agriculture Marketing

Nepal should simultaneously design, develop and implement packaging, marketing and branding strategies for the Nepalese agricultural products that have a comparative advantage in the world market.

In Sri Lanka, the authority and responsibility of marketing and branding of Ceylon Tea, a globally respected brand, is delegated to Sri Lanka Tea Board. The board currently has a chairperson who has extensive experience in marketing and management and has been successfully able to provide new markets to the tea industry of Sri Lanka. Initiatives that uplift the image of plantation workers, regains lost markets while venturing into the new and positions Ceylon Tea as the premium tea brand in the world are given priority by the board. The board operates as an enterprise in itself.

Likewise, investment in the entire value chain – input, production, storage, transport, processing, and distribution should be continued.

Stimulating Agro-processing

In recent years, high-value cash crops have been deemed to show great promise for export-oriented agriculture in Nepal. However, the export of such products is constrained by a number of factors, amongst which lack of value addition service - which comprises processing, packaging, and preserving - is the most eminent.

Table 3: Quantity and Value of Ginger Export Among Top Ginger Exporters in the World

Country	Quantity (Kg)	Value (USD)	Value per 1000 Kg (USD)
Thailand	71678000	55771.8	0.78
UAE	29369700	29047.32	0.99
India	26863700	44554.56	1.66
Brazil	22091400	22164.41	1.00
European Union	12480300	25830.53	2.07
Nepal	10656100	4189.31	0.39
Indonesia	4444940	4933.16	1.11
Vietnam	3854570	10560.77	2.74
Other Asia	1819400	6102.65	3.35
Nigeria	2324090	1922.6	0.83

Source: World Bank, 2019

The inability of Nepal to enhance value addition services that would ensure both backward and forward linkages in agriculture has huge economic implications, as it becomes impossible to compete in the world market. For instance, Nepal is the fourth largest ginger producer in the world after India and falls amongst the top 20 ginger exporters in the world market. However, while Nepal exports a large quantity of ginger the value received from the export is smaller when compared to other nations.

The above table depicts that the value received by Nepal for ginger export is the smallest when compared to selected top exporters of ginger in the world market. This is attributable to the lack of value addition service in the sector. Nepal exports most of the raw ginger to India, which converts them into processed ginger and further exports to the world. Only 25 percent of ginger is exported in processed form of Sutho (traditionally dried ginger) or powdered ginger (GIZ, 2017). Likewise, Nepal exports almost 99 percent of its cardamom to India. India, which is one of the largest exporters of cardamom, re-packets these products and sells them to other countries like Pakistan, which is one of the largest importers of cardamom.

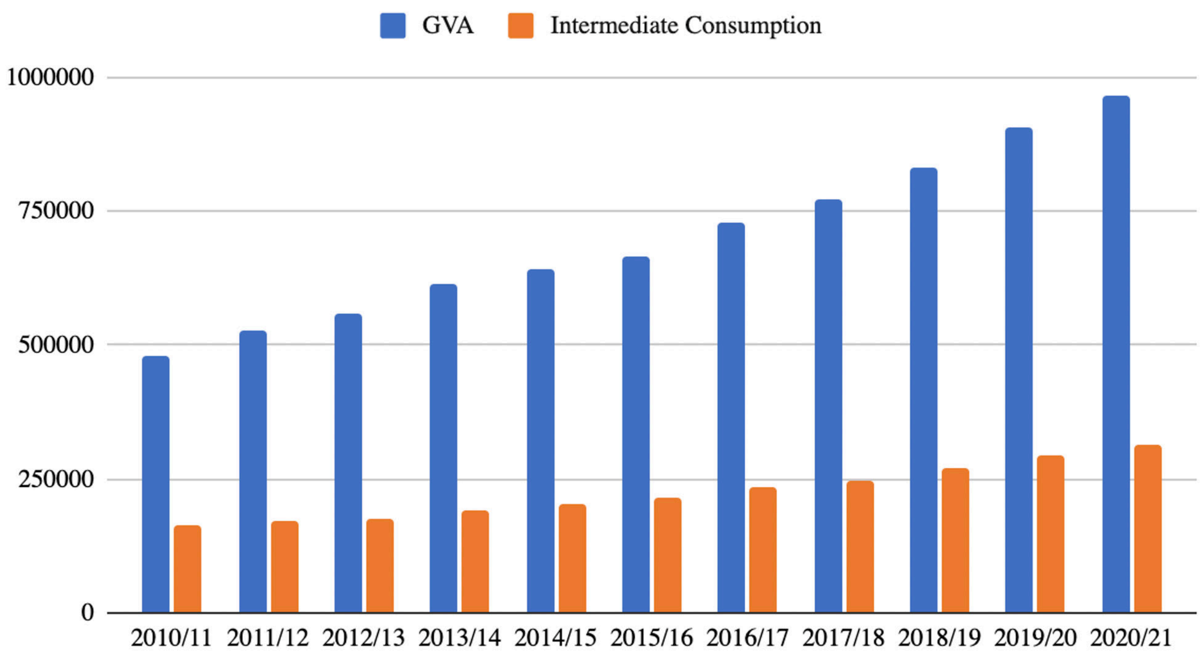
It was estimated that more than 25 percent of agricultural exports are without processing in Nepal, due to which Nepal has not been able to leverage the advantage that Nepal would enjoy by producing and exporting high value crops. On the other hand, countries with better agro-processing sectors have been enjoying greater profit by processing raw materials from Nepal, whereas Nepal's income has been limited.

Processing plants in Nepal are mainly confined to processing of cereals like rice and wheat;

processing of crops like tea and coffee; the processing of animal products (especially dairy and meat); sugar; production of confectionery items; and, processing of poultry feed. Despite the presence of numerous agro-processing plants, processing plants of high value crops like cardamom, ginger, herbs, and others still are limited. The largest food processing firms in Nepal produce noodles, sugar, and biscuits.

In the case of cereals, total production is insufficient to meet the domestic demand, and Nepal has been a net importer of cereals for most of the past three decades. A reversal of the scenario is deemed unlikely in the near foreseeable future. Therefore, continuation of domination of cereal crop processing might not seem as lucrative as other products where Nepal has a comparative advantage in the long term.

Figure 6: Gross Value Added of Agriculture Products and their Intermediate Consumption



Source: Central Bureau of Statistics, 2020/21

The data pertaining to intermediate consumption of agricultural goods by industries shows sluggish growth when compared to the Gross Value Added by the agricultural sector in the economy. This implies that the majority of agricultural produce are either consumed directly or are wasted.

Amidst limited processing plants and lack of linkage between agricultural produce and industries, it has been reported that about 40 percent of Nepalese agricultural goods are wasted. Thus, Nepal needs to promote processing industries in other sectors which can provide higher benefit to the economy.

The goal of promoting value addition service in agriculture to enhance competitive edge of Nepal was introduced by the Agriculture Development Strategy (2015) in Nepal. With the aim to increase value addition service, the strategy aimed to strengthen value chain linkages and increase PPP investments. The government promised to be actively involved in building infrastructure such as cold storage and processing units to promote value chain and access to markets.

However, today in 2022, the goals remain unmet. Some of the fundamental challenges contributing to slow growth in agro-processing and factors that has disincentivized investment in the sector are discussed below:

i. Lack of information and knowledge amongst human resources regarding the operation of new technologies. One of the problems identified by the Prime Minister Agriculture Modernization Program (PMAMP) was associated with utilized modern machinery provided by the government due to limited skills of human resource.

ii. Excessive standardization but lack of quality testing labs to determine the quality and safety of agricultural produce.

iii. Lack of proper linkage with the agriculture sector.

iv. Lack of accreditation services to compete in the international market.

v. Compliance related to both importing raw materials and machineries, and exporting.

vi. Lack of infrastructure and power supply.

Recommendations

1. Foreign Direct Investment

Permitting Foreign Direct Investment (FDI) in agriculture would not only promote agro-processing industries but also would allow private companies in Nepal to benefit from modern technology and knowledge transfer. The government should thus remove the agriculture sector from the negative list of FITTA and should also refrain from incorporating any provision of minimum investment in the agriculture sector in case of foreign investment.

In Brazil, the government initiated a liberal policy for agriculture allowing foreign companies to operate wholly owned subsidiaries in the country and acquire domestic companies. As a result, Brazil is one of the fastest growing markets for agricultural inputs and an agricultural research hub for several multinational companies.

A study conducted among 126 organizations scattered across Bangladesh, Kenya, Senegal, Tanzania and Zambia identified that involvement of the private sector in technology transfer helped the agricultural sector realize most new technologies for pesticides, machinery, poultry, fertilizers, and processing (Gisselquist et. al, 2013) . The technology transfer from private and international agencies helped Bangladesh enhance productivity of hybrid rice and new vegetable cultivators. Private technology transfer also led to and supported private research.

2. Strengthen Quality Standardization Services

Nepal should focus on strengthening its quality standardization services like testing and certification of agricultural products. A successful transition from farm to market requires rigorous quality control measures. Given the limited capacity in Nepal for certification and quality control, increasing investment in this aspect of the value chain is an important agenda. In line with the same, promulgation and implementation of appropriate food safety guidelines should be introduced. Establishment of our own accreditation service, and promotion of good manufacturing practices can substantially help reduce the cost of production.

3. Invest in Infrastructural Facilities

Value addition and chain development also require investment in infrastructural facilities such as access to roads, access to electricity, cold storage, customized vehicles for the transportation of livestock, small market places, etc. This is an area that can achieve its potential by attracting the private sector and development partners in the form of public-private partnerships. To enhance competitiveness in specific value chains through development of improved production and post-harvest management skills Indonesia, Colombia, and Kenya had introduced the Public Private Partnership model. The PPPs improved access to specialized infrastructure such as greenhouse and fertigation equipment (Indonesia), collection centers and collective coffee washing stations (Colombia), and a packing house and cottage processing plants (Kenya) (FAO, 2016).

4. Research and Extension Services

Research and extension are equally essential services associated with value addition and value chain development. Research has been led by the public sector in Nepal and better strategies are required to increase the involvement of the private sector. Since research is a long-term investment, this is an area where a public-private partnership can yield better results. Private sector involvement on a larger scale, therefore, can capitalize on this network while strengthening it with further capacity building activities.

5. Commodity Futures Market

Promoting commodity futures markets will help link agriculture with industry. A commodity futures market is a platform through which futures contracts—agreements to buy and sell goods at a specific price in a future date—are bought and sold. The contracts go through an exchange clear house which acts as stock brokers for the commodity market. The contracts help farmers to hedge the risk of price fluctuations as well as payment default. If such a thing could be guaranteed, it would subsequently create an enabling environment for contract farming in Nepal. As a result, farmers' access to other benefits like crop insurance, warehousing facilities and higher credit from formal institutions would expand.

Reference

Boettiger, S., Denis, N., & Sanghvi, S. (2017, December 1). Successful agricultural transformations: Six core elements of planning and delivery. McKinsey & Company. https://www.mckinsey.com/industries/chemicals/our-insights/successful-agricultural-transformations-six-core-elements-of-planning-and-delivery

Central Bureau of Statistics. (2021). National Accounts Statistics of Nepal 2021-22. National Planning Commission. https://cbs.gov.np/national-accounts-statistics-of-nepal-2021-22-annual-estimates/

Giri, A., et al. (2017). Can Nepal attain self sufficiency in major crops production? Journal of Forest and Livelihood, 15(2), 1-12.

Gisselquist, D., Mwala, M., Nagarajan, L., Pray, C., Spielman, D., Rashid, H. A., Sene, L., & Stads, G.J (2013). Private sector agricultural technology transfer into Bangladesh, Kenya, Senegal, Tanzania, and Zambia. Retrieved from https://www.asti.cgiar.org/pdf/private-sector/PS-5-country-study.pdf

International Food Policy Research Institute. (2019). Agriculture Development in CAREC Member Countries: Review of Trends, Challenges, and Opportunities. Asian Development Bank. https://www.adb.org/sites/default/files/publication/549916/agriculture-development-carec-countries.pdf

International Fund for Agricultural Development. (2019). Impact Brief: High-Value Agriculture Project in Hill and Mountain Areas (HVAP). IFAD. https://www.ifad.org/documents/38714170/41096781/NP_HVAP_IA+brief.pdf/71130896-424c-fe1d-c9a0-50bd290eef17?t=1554795473000

Khatiwada, D. (2020, February 20). Why agricultural subsidies have failed to benefit needy farmers. The Kathmandu Post | Read online latest news and articles from Nepal. https://kathmandupost.com/29/2020/02/20/why-agricultural-subsidies-have-failed-to-benefit-needy-farmers

Knight, A. (2021, June 29). Sales subsidy success holds promise for Nepali farmers. Heifer International. https://www.heifer.org/blog/subsidy-sucess-holds-promise-for-nepali-farmers.html

Ministry of Finance. (2016). Budget Speech of Fiscal Year 2015/16. Government of Nepal. https://www.mof.gov.np/uploads/document/file/Budget%20Speech%20 2015_20201118032923.pdf

Ministry of Finance. (2017). Budget Speech of Fiscal Year 2016/17. Government of Nepal. https://mof.gov.np/uploads/document/file/20160601173941.pdf

Ministry of Finance. (2018). Budget Speech of Fiscal Year 2017/18. Government of Nepal. https://www.mof.gov.np/site/publication-detail/1412

Ministry of Finance. (2019). Budget Speech of Fiscal Year 2018/19. Government of Nepal. https://mof.gov.np/uploads/document/file/Budget_Speech_2018_20201118080436.pdf

Ministry of Finance. (2020). Budget Speech of Fiscal Year 2019/20. Government of Nepal. https://www.mof.gov.np/site/publication-detail/2376

Ministry of Finance. (2021). Budget Speech of Fiscal Year 2021-22. Government of Nepal. https://www.mof.gov.np/uploads/document/file/Budget%20Speech%20 2020_20201118033431.pdf

Ministry of Finance. (2021). Economic Survey 2020/21. Government of Nepal. https://www.mof.gov.np/uploads/document/file/1633341980_Economic%20Survey%20 (Engslish)%202020-21.pdf

MoALD. (2020). Statistical Information on Nepalese Agriculture 2019/20. Government of Nepal. https://moald.gov.np/wp-content/uploads/2022/04/STATISTICAL-INFORMATION-ON-NEPALESE-AGRICULTURE-2076-77-2019-20.pdf

MoALD. (2021). Selected Indicators of Nepalese Agriculture (pocket book) 2021. Government of Nepal. https://moald.gov.np/wp-content/uploads/2022/04/Selected-Indicators-of-Nepalese-Agriculture-pocket-book-2021.pdf

MoICS. (2016). Nepal Trade Integration Strategy 2016. Government of Nepal. https://moics.gov.np/public/uploads/shares/publication/NTIS_2016_1546150729.pdf

Sharma, R. (2019). Trends, structure and drivers of Nepal's agricultural trade. In: G. Thapa et al. (Eds.), Agricultural transformation in Nepal. SpringerLink. https://doi.org/10.1007/978-981-32-9648-0_15

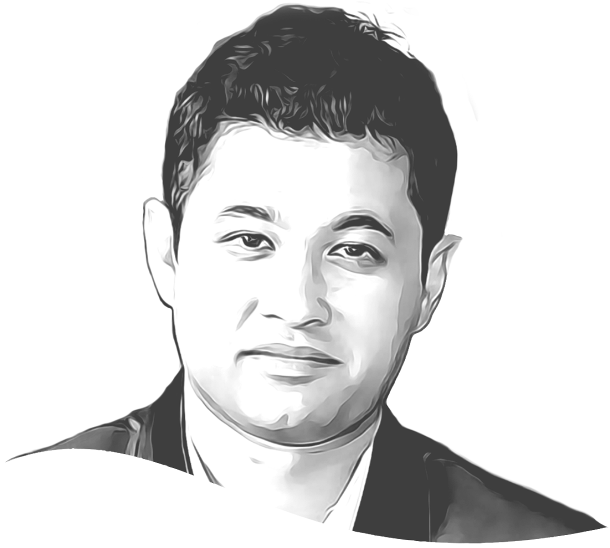
Trade and Export Promotion Center. (n.d.). Nepal Trade Information Portal (Data Visualization). Ministry of Industry, Commerce and Supply, Government of Nepal. https://nepaltradeportal.gov.np/web/guest/data-visualization

Union Public Service Commission. (2020, December). Issues related to farm subsidies in India. Samjhao. https://samajho.com/upsc/issues-related-to-farm-subsidies-in-india/#:~:text=Indirect%20subsidies%20 are%20those%20subsidies,Minimum%20 Support%20Price)%2C%20etc

Welt Hunger Life, & Concern Worldwide. (2021). Global Hunger Index. Ethicalsector. https://www.globalhungerindex.org/pdf/en/2020/Nepal.pdf

World Bank. (2019). Enabling the Business of Agriculture 2019. The World Bank. https://eba.worldbank.org/en/eba

World Bank. (2021). Cereal Yield (kg per hectare). data.worldbank.org. https://data.worldbank.org/indicator/AG.YLD.CREL.KG?view=chart

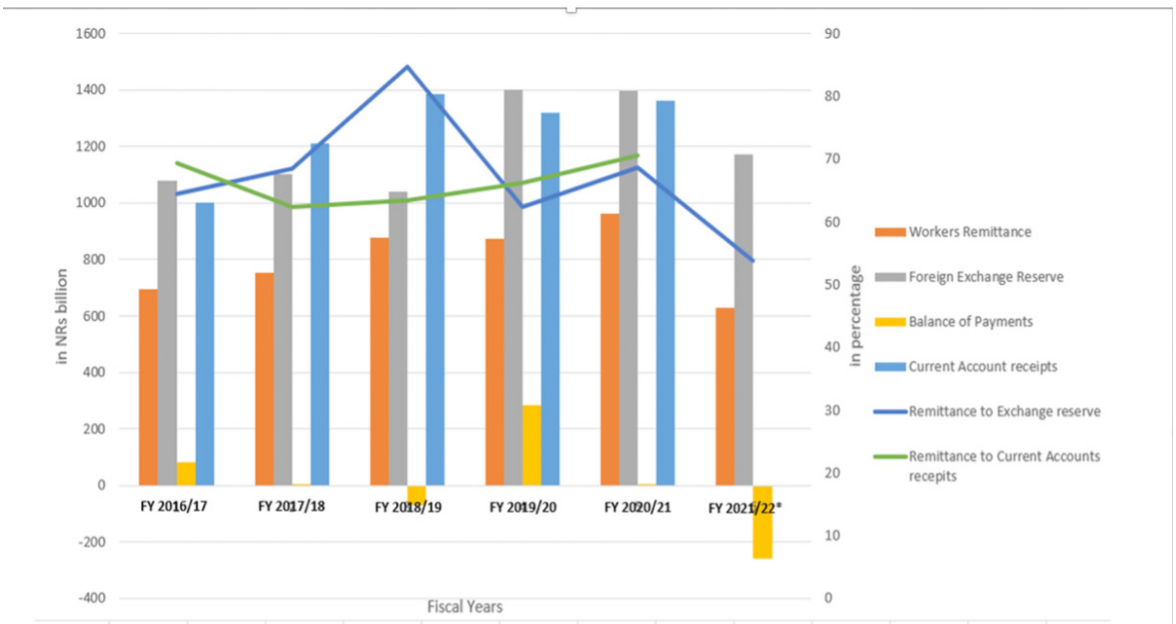


Converting Remittance to Saving and Investment

- Prience Shrestha

Remittance inflows to Nepal decreased by 1.7 percent to NRs.631.19 billion in the first eight months of the fiscal year (FY) 2021-22[1]. In comparison, the remittance inflow for the first eight months of the last FY (2020-21) had increased by 8.7 percent(NRB, 2022). This incident depicting a downwards trend in remittance earnings has compromised the macroeconomic wellbeing of the country as it witnesses ballooning international payments or Balance of Payments (BoP) deficits and shrinking gross foreign exchange reserve status (NRB, 2022). Presently, BoP deficit for the first-eight month of the FY 2021-22 stands at NRs 258.64 billion compared to the surplus of NRs 68 billion for the first eight months of the FY 2020-21. Foreign exchange reserves for the first eight months of the FY 2021-22, on the other hand, stands at NRs 1171 billion as against NRs 1436.5 billion in the same period in the FY 2020-21. That signifies 18.4 percent loss in foreign exchange reserve (NRB, 2022).

Figure 1: Remittances, Foreign Exchange Reserves and Balance of Payments



Source: (NRB, 2022) **For FY 2021/22, the data is limited to first eight months*

1 Figure for the review period ending first eight month is applied for consistency as such is only available for FY 2021/22

Figure 1 depicts the significance of remittances to Nepal. Inward remittance figure tallies to more than 60 percent of the foreign exchange reserves and represented around 22 percent of the Gross Domestic Product (GDP) of the country between FY 2016/17 and FY 2021/22. Also, remittance has accounted for more than 65 percent of the total current account receipts entering the country in the last two fiscal years. Therefore, remittance, presently and until the foreseeable future, can be considered to be a fundamental element to stabilize foreign exchange reserves and balance of payments surplus.

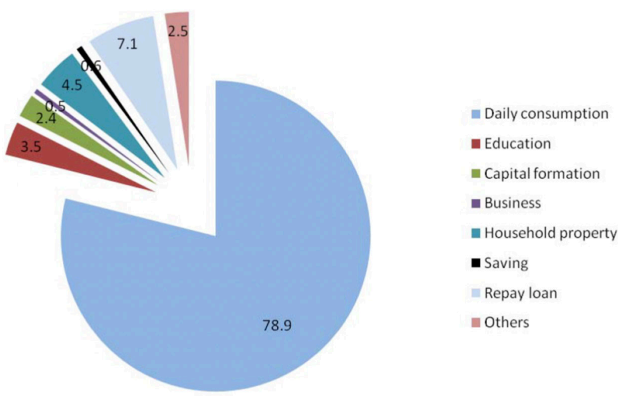
Furthermore, remittances are regarded as one of the important sources of external financing in general as they score more than three times the size of the Official Development Assistance (ODA) and higher than Foreign Direct Investment (FDI) for low- and middle-income countries (Barne & Pirela, 2019). Furthermore, remittances are also one of the essential components of sustainable economic growth as they touch upon the Goal 8 (Decent Work and Economic Growth) and Goal 9 (Industry, Innovation and Infrastructure) of the Sustainable Development Goals (SDGs). Thus, remittances are also a foundation for sustainable economic growth.

Livelihood Realities of Remittances

Remittances also generate a positive effect on the economy by boosting household savings, investment, growth, consumption, and income distribution. By promoting productive use at the local level, remittances can potentially generate income and employment opportunities, and spur new economic and social infrastructure and services (Maharjan & Dhakal, 2018).

Studies identify Nepal to be heavily dependent on remittance income also based on the proportion of households that depend on it. Studies indicate that almost half of all Nepalese households have at least one migrant family member currently living abroad. In migrant households, remittances form a significant percentage (as high as 60%) of total migrant household income (Sah, 2019). In terms of application of received remittance income, the Nepal Living Standard Survey 2011 found that significant proportion of the remittance incomes are used for meeting household daily consumption needs and to repay debts, and that only a fraction (<2%) of remittance inflow is saved for investment in the productive sectors. It is often stressed that a higher proportion of remittances is spent on food, education, and healthcare, but these can be considered to be essential for building human capital, a prerequisite for development (CBS, 2011).

Figure 2: Distribution of Remittance by use



Source: (CBS, 2011)

From the above figure, it can be easily observed that the lowest proportion (i.e., 0.6 percent) of the remittance income is saved and contributes towards the Gross National Savings of the economy. While literature argues that remittance-driven expenses are often rational, and that remittance recipients manage to save after dealing with expenses, there is a crucial need to look at other factors that lead to low savings, and ultimately low investment of remittance income. Studies nevertheless identify

- lack of policy and institutions promoting remittance investment
- lack of products for investment,
- lack of knowledge and skills of migrant families regarding availability of existing investment products and
- lack of promotion of the existing investment products

to have suppressed conversion of rural remittances into savings and investments. However, remittance-receiving households save and invest more on average than those households who do not receive remittances (Maharjan & Dhakal, 2018), (Sah, 2019), and (Pant, 2019). Hence, better access to financial products from BFI can give additional incentive to transform remittances into savings and investments.

Current Plans, Policies, and Regulations

The importance of foreign employment and remittance flow was increasingly realized in the Three-Year Interim Plan (FY 2007–08 to FY 2009–10). The subsequent Three-Year Plan (FY 2010–11 to 2012–13) further reinforced the role of remittances in foreign exchange and balance of payments. The two Three Year Plans (2013–14 to 2015–16) and (2016–17 to 2018–19) increasingly reinforced the role of remittances in foreign exchange, balance of payments, and the need to promote the productive use of remittances.

On the policy and regulation front, issues related to remittances are dealt under Foreign Employment Policy 2068 [2012], which is a subset of the Labor and Employment Policy, 2006. Meanwhile, foreign employment and remittances in Nepal are regulated by the Foreign Employment Act 2064 [2007] and Foreign Regulations 2064 [2007]. Furthermore, exercising the power conferred by clause 12 of the Foreign Exchange (Regulation) Act 2019, the NRB has framed and executed NRB Remittance Regulations 2067 [2010] for an individual, firm, company, or institutions authorized for remittance business under a foreign exchange transactions license. The regulations detail procedures such as eligibility criteria, supporting document required, and the conditions for inward remittance business.

Current priority is to adequately channel remittance income into savings and investment through formalization of remittance money and integration of returnee migrant laborers in the domestic economy in the form entrepreneurs and small business owners. Remittance is acknowledged as a tool that can enable sustainable economic development and growth. The question that Nepal grapples with at the moment is how to ensure that the policies, priorities and objectives materialize.

Formalization of Remittance

The Government of Nepal has introduced various plans, policies, strategies, and approaches to direct remittances through legal channels. On such front, the NRB began granting licenses to private sector organizations interested in remittance-transfer business from 2002. In 2016, more than 50 firms, excluding commercial banks, were undertaking money-transfer business. Today, multiple remittance services such as IME, CG Remit, and City Express are serving formal transfer of hard-earned money earned by foreign migrant labors. The extensions of such remittance services at every nook and corner of the country have heavily incentivized and eased remittance of money from formal channels (Maharjan & Dhakal, 2018). Regardless, informal medium of remittance (also known as Hundi) remains a large source of remitting foreign earned money into the country although statistically unrecognized (Maharjan & Dhakal, 2018).

Literatures identify that the level of financial development within the banking and financial sector is crucial to determine the choice between transferring funds through formal, transparent channels or through informal channels not recorded in official statistics (Maharjan & Dhakal, 2018). Financial development and institutional framework are thus very important to incentivize transfer of remittance through official mediums. As international case studies show, financial, monetary, and social motivations have remained widely successful in incentivizing remittance through formal channels. Thus, quantity of remittance flow through formal channels could be increased significantly if remittances are linked with financial products that pertain to domestic & business credit and insurance schemes (Maharjan & Dhakal, 2018).

On such note, the provision of special deposit account targeting remittance income and foreign migrant laborers need to be established in BFIs to enable innovative and incentivizing financial products that serve the interest of the migrant laborers and their families (Sah, 2019). Cooperation between the regulating agencies and BFIs is essential to develop such deposit accounts connecting with remittance money sent through formal/official channels. Amongst many other things, credit schemes such as educational loan, mortgage loan, and personal withdraw facilities to support immediate expenditure needs can be facilitated with such accounts that support the immediate priorities of the migrant workers and their families (Sah, 2019). Loans, mortgages, and foreign employment related debt repayment schemes can be linked with remittances through such special bank accounts offering attractive repayment options that can ease and lower the debt burden of remittance dependent households (Sah, 2019).

Importantly, such deposit accounts can also be coupled with life and non-life insurance schemes and other monthly contribution plans that can function as a pension and social security scheme (Maharjan & Dhakal, 2018). On the latter case, discussions are ongoing about the creation of an Overseas Employees' Pension Benefits Fund in collaboration with the Employees' Provident Fund. Apart from that, premium interest rates on the remittance funds by the BFI can be organized to incentivize the flow of remittance from formal channels. Experience of south Asian countries reveal that provision of premium interest rates on the remittance funds by the BFI has remained effective in increasing the amount of remittance flow from formal channels (Pant, 2019).

Meanwhile, studies show imposing tax on remittances greatly disincentivizes migrants to remit through formal channels and resort to informal channels (Maharjan & Dhakal, 2018). However, given that current regulation already avoids tax on remittance, the government needs to take a step further by initiating schemes that provides tax breaks on channelization of formally remitted income into savings accounts or on the purchase of capital machinery or equipment for starting an enterprise. Tax break schemes are also observed by the literatures to be an effective medium to incentivize remittance through formal channels (Pant, 2019).

Converting Remittances to Savings and Investments

As current data suggests, the use of remittance money for productive investment, proxied by capital formation, savings, and business is minimal. As such, the total use of remittance for productive purposes stands at a meagre 3.5 percentage (calculations based on Figure 2 above).

Studies mention that an essential component for the investment of remittances is to increase the financial literacy of migrants, returnees, and migrant-sending households. It is essential to enhance the financial skills of both receivers and senders with the knowledge and skills to evaluate their options on sending through formal channels, choosing the most suitable financial products to employ their remittance savings on, and using remittance income to meet their financial goals (Maharjan & Dhakal, 2018). However, reaching the individual migrants and remittance recipients and improving their financial literacy is a daunting task, and it is important to build the capacities of the financial institutions such as Microfinance Institutions (MFIs) that can begin such awareness campaigns at a larger scale (Maharjan & Dhakal, 2018).

Likewise, Foreign Employment Savings Bonds (FESBs) could play a role in securing remittance income into gross savings and investment of the economy. FESBs target Nepali migrant workers with the objective of channeling their remittances into investment in national development infrastructure and programs. However, past experiments of the Nepal government trying to secure remittance money by issuing FESBs have not borne promising results. Despite having an attractive annual interest rate of 9%–10%, the bonds were not a success as can be seen from their performance over the years. Reasons given for such poor performance include lack of awareness, complicated procedures, and concerns about exchange rate risk, as payments are made as per the interest/return rate at the time of subscription (Maharjan & Dhakal, 2018). The success of this approach highly depends on the purpose of the remittance in terms of its application for consumptions, savings, or investment. At present, the current trend or obligation of the remittance recipients to utilize major chunk of remittance for consumption purpose might not motivate recipients to take benefit of tax breaks on savings and investment activities concerning remittance.

From Remittance to Entrepreneurship

It is important to note that propagation of entrepreneurship and small business development is crucial to establish a strong foundation of economic growth in any developing country including Nepal. Meanwhile, given the significance of remittance sector to the national economy, the ability to transition remittance income into entrepreneurship and small business development can play synergistic role in helping Nepal reach its optimal growth solely as a result of quality capital formation. Hence, it can be asserted that policies and approaches to link remittance with entrepreneurship and small business development is crucial in the context of Nepal.

First and foremost, to create synchronization between remittance income and entrepreneurship, it is important to recognize that returnee migrants, apart from their investable remittance income, are a vital source of human capital, which could profitably be used to support the growth and development of micro and small enterprises. Therefore, it is important to provide sufficient knowledge and training to enable returnee migrants to productively use the skills and knowledge acquired during their stay abroad and to provide on-the-job technical backstopping support to enable them to open a small business back home (Sah, 2019). The primary thrust of the training support should revolve around building the confidence of the migrant workers and their families to start an enterprise for generating self-employment opportunities (Sah, 2019). On such front, Nepalese MFIs can intervene by developing business development services such as training, business advice, marketing assistance, and skill development specifically targeting returnee migrant laborers and their families.

Apart from nonfinancial incentives to lure remittance money into small business development, Nepal can learn from the successful examples of Mexico and El Salvador to establish matching fund programs to bridge any financing gap – in the form of equity or loan - suffered by returnee migrants attempting to invest formally remitted money into business ventures (Maharjan & Dhakal, 2018). Collaborations with BFIs and alternative financing communities can be sought for such purposes.

Conclusion

- Special deposit accounts targeting remittances and foreign migrant laborers need to be established and promoted by BFIs. The products need to be innovative and serve the interest of the migrant laborers and their families.

  - Credit schemes such as educational loan, mortgage loan, and personal withdraw facilities to support immediate expenditure needs can be facilitated with such accounts

  - Loans, mortgages, and foreign employment related debt repayments can be linked with remittances through such special bank accounts offering attractive repayment options

  - Life and non-life insurance schemes and other monthly contribution plans that can function as a pension and social security scheme can be coupled with the special deposit accounts

  - Premium interest rates on the special deposit account can be provided to incentivize the flow of remittance from formal channels.

- Tax breaks on interest on savings account and on the purchase of capital machinery or equipment for starting an enterprise can be provided on purchases made using the formally remitted money.

- Financial literacy of migrants, returnees, and migrant-sending households can be increased to enable them to realize how remittances can be used to meet the financial goals, and to understand how product features differ, to calculate and compare costs, and to determine what they can afford and what products are best suited to their requirements and choose the most suitable financial product/s.

- Trainings and on-the-job technical backstopping support can be provided to returnee migrants to enable them to productively use the skills and knowledge acquired during their stay abroad and to enable them to open a small business back home respectively

- Individual matching funds through the means of BFIs and alternative financing community in the form of equity or debt to bridge any financial gap faced by returnee migrant intending to pool sufficient capital from formally remitted money to start a business or enterprise can be provided.

References

Barne, D., & Pirela, F. (2019). Data Blog. Retrieved from World Bank Blogs: https://blogs.worldbank.org/opendata/money-sent-home-workers-now-largest-source-external-financing-low-and-middle-income

CBS. (2011). Nepal Living Standard Survey 2010-11. Kathmandu: Central Bureau of Statistics.

Maharjan, A., & Dhakal, N. H. (2018). Approaches to the Productive Use of Remittance in Nepal. Kathmandu: International Center for Integrated Mountain Development.

NRB. (2022). Current Macroeconomic and Financial Situation in Nepal. Kathmandu: Nepal Rastra Bank.

Pant, B. (2019). Harnessing Remittances for Productive Use in Nepal. Kathmandu: Nepal Rastra Bank.

Sah, B. N. (2019). Remittance and Economic Development of Nepal. Patan Pragya.

Nepal's Trade and Comparative Advantage

- Nishant Khanal

Introduction

In the year 2026, Nepal will graduate from a low-income least developed nation to a developing nation. Nepal's estimated GDP is $30.64 billion and GDP per capita is $1236.61 (World Bank, 2020). The population of the country is expected to be 30 million by the year 2021 and the median age is 24, Nepal's ratio of working to non-working population will remain high in the years to come.

Structurally, Nepal's GDP is reliant on agriculture. However, the service sector in the country is the largest contributor to the GDP. Agriculture, which used to account for over half of the GDP until a decade ago now only accounts for 2.75 percent of the GDP and 65.7 percent of the domestic employment. The industrial sector—whose largest sub-sectors consist of manufacturing and construction—contributes 15.1 percent of GDP. The Services sector—whose largest sub-sectors include real estate, trade, transport, communications, and education—contributes 57.4 percent of GDP (Nepal Rastra Bank, 2020).

Over the years, Nepal's economy is gradually shifting away from traditional agriculture; a significant number of Nepali people are migrating to primarily Gulf nations, Malaysia, India and Europe in search of employment opportunities. An estimated four to six million Nepali people are outside Nepal (ILO 2019) and the remittance they send back is the lifeline of the Nepali economy. Nepal received $8.12 billion in remittance in 2019 which is 26.5% of the GDP (Nepal Rastra Bank,2019). Despite a yearlong pandemic in 2020, Nepali's abroad sent over $9 billion remittance in the year 2020. This is almost 28% of the GDP (Ministry of Finance, 2019). Hence, a significant amount of wealth in Nepal is created abroad through the export of the labor, as opposed to the export of goods and services produced within the Nepali economy. This proves that Nepal's consumer market is import driven.

Until recently, Nepal's long-standing trade deficit was balanced by sufficient inflows of remittance, which helped balance current account. The increase in trade deficit has outpaced the remittance inflows since FY

2016/17 when the current account had a deficit of $95.4 million. In the year 2018 the current account deficit ballooned to $2.3 billion; however this was contained in the following year in 2019. In the year 2020, as the pandemic disrupted imports, Nepal's current account went into surplus (Nepal Rastra Bank 2020).

India accounts for 65 percent of Nepal's trade, China 14 percent and the rest of the world for the remaining 22 percent. China's share of total trade to Nepal has grown from 10 percent in the year 2014 to 14 percent in the year 2019. Nepal imports more than it exports. In the year 2019, Nepal imported $14.6 for every dollar exported (World Bank 2020). Nepal mainly exports woolen carpets, polyester yarn, juices, tea and spices (cardamom), textiles, jute goods, readymade garments and other apparel items and mainly imports petroleum products (diesel, petrol, LPG), industrial use items (mainly steel billets), gold, construction equipment and cement clinkers, rice, and telecommunications equipment.

There is a growing concern over Nepal's trade trend and pattern, as the country is import reliant. There have been several efforts to increase Nepal's export, however there has not been any significant impact on Nepal's trade performance. At the outset, this essay aims to look into Nepal's trade pattern, analyse the trend of the trade in the country and identify the reasons for such a trend. This essay has identified the features of Nepal's foreign trade and gives an argument on why there is a need for better trade openness in Nepal, by using the augmented benchmark gravity model of trade. The data for this study are from various secondary sources like Nepal's Trade and Export Promotion Center (TEPC), World Integrated Trade Solution (WITS), Central Bank of Nepal (NRB) and UN COMTRADE.

Nepal's Trade Pattern

This section gives an overview of Nepal's trade trend, the goods and services Nepal imports and exports and Nepal's major trading partners. As Nepal is an import-oriented economy, Nepal has been importing more than exporting. The table below helps us understand Nepal's trade pattern on goods and services for the last 5 years.

Table 1: Overview of Nepal's Trade

Year	2015	2016	2017	2018	2019
Imports of Goods (million USD)	6,380	9,650	10,345	12,712	12,340
Exports of Goods (million USD)	720	740	742	786	968
Imports of Services (million USD)	1,225	1,250	1,591	1,774	1,691
Exports of Services (million USD)	1,139	1,282	1,383	1,477	1,512
Imports of Goods and Services (Annual % Change)	10	3	27	16	8
Exports of Goods and Services (Annual % Change)	7	-14	11	6	5
Trade Balance (million USD)	-5,698	-8,002	-9,365	-11,916	-11,370
Foreign Trade (in % of GDP)	53	49	51	55	55
Imports of Goods and Services (in % of GDP)	41	39	42	46	46
Exports of Goods and Services (in % of GDP)	12	9	9	9	9

Source: Trade and export promotion center

Figure 1: Nepal's Import vs Export

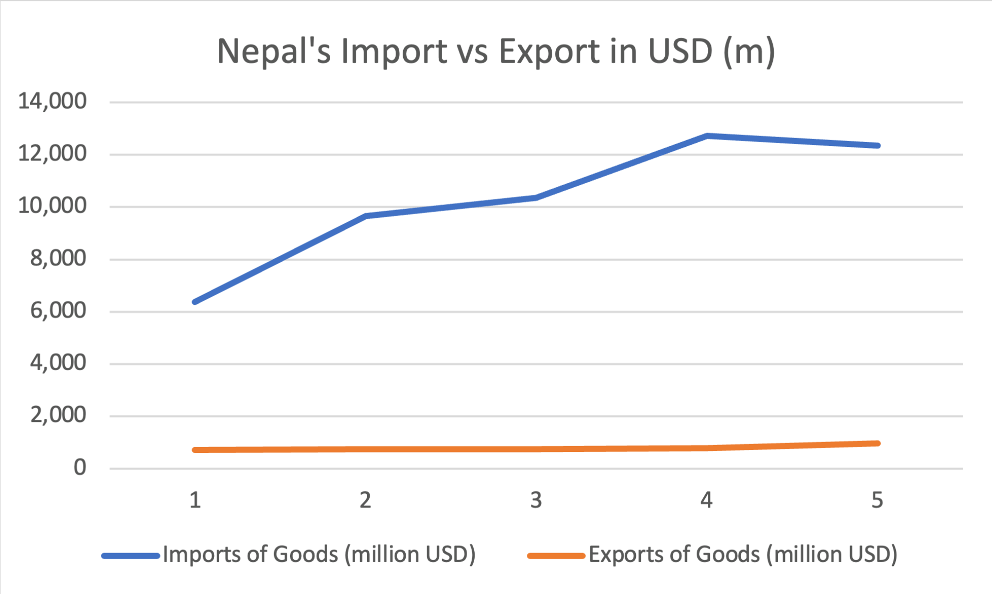


Figure 1 above shows that Nepal's export has been almost consistent over the last 5 years, whereas the imports are increasing.

Table 2: Nepal's Trade in Product Categories

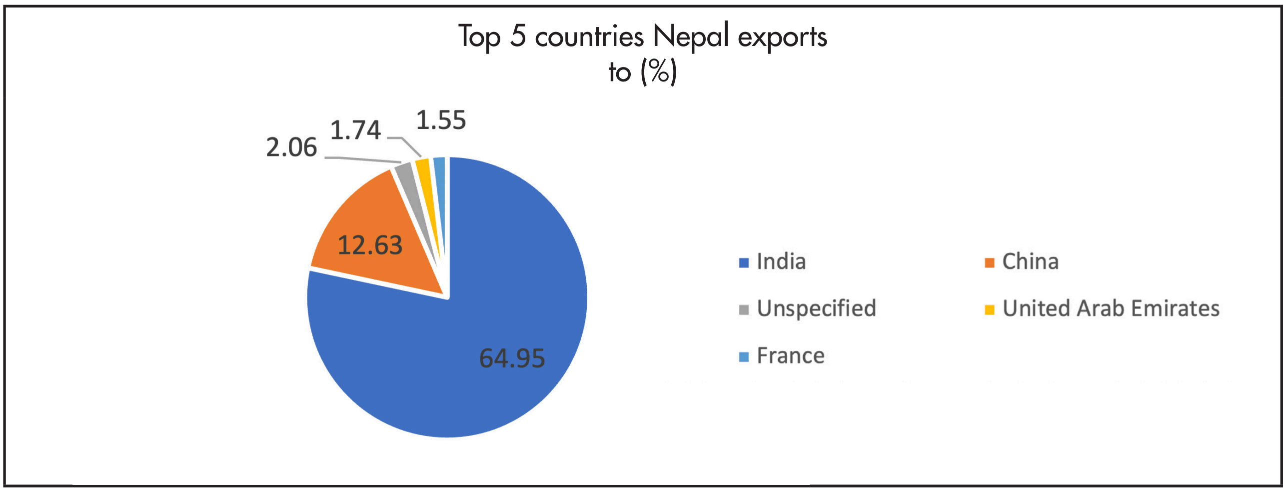
	Exports		**Imports**	
	Export (US$ m)	Share (%)	Import (US$ m)	Share (%)
Raw materials	44	5.92	945	9.42
Intermediate goods	273	36.89	3,497	34.83
Consumer goods	409	55.27	3,259	32.46
Capital goods	14	1.92	2,299	22.90

Source: WITS 2019

For a long time, Nepal's foreign trade has largely been confined to India primarily owing to close proximity, similar socio-economic conditions and availability of transport facilities (Pant and Panta 2019). The volume of Nepal's foreign trade with India in terms of both exports and imports has been rising due to the increasing demand of different types of industrial raw materials, machinery and petroleum products in order to undertake various types of developmental works and consumer goods to meet the requirements of the growing population.

Nepal's exports are led by Palm Oil (20.1% of all exports in 2019), Non-Retail Synthetic Staple Fibers Yarn, Knotted Carpets, Soybean Oil and Flavored Water. The leading export partners of Nepal have been India, USA, Germany, People's Republic of China, United Kingdom, France, Italy, Canada, Japan and Bangladesh. This is illustrated in figure 2 which depicts that India, and China constituted about three-fourths of Nepal's total exports in 2019/2020.

Figure 2: Nepal's top exporting countries in 2019



Source: WITS 2019

Figure 3: Nepal's Top Export destination

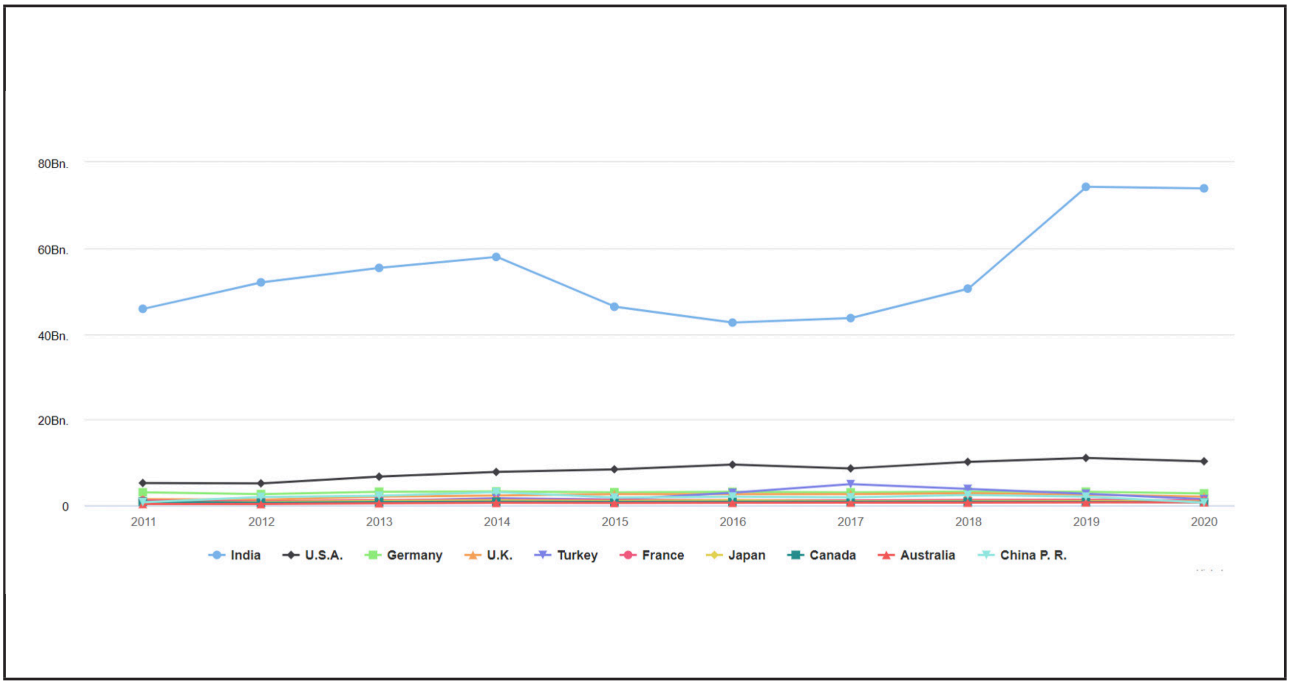


Figure 3 above is obtained from data by the customs department and using R graphics to see the pattern of Nepal's top 10 exporting countries. India, USA and Germany remain Nepal's consistent trading partner for the last decade. Trend shows that Nepal's export to China has been increasing after 2014. The cumulative export from the last 10 years of export shows that following are the top 10 products Nepal has been exporting.

Table 3: Nepal's top export items

S.N.	Product	S.N.	Product
1	Soyabean oil	6	Woven fabric of jute or bast fibers
2	Carpet, knotted of wool or fine animal hair	7	Woven fabric obtained from strip or the like
3	Palm oil	8	Felt
4	Big Cardamo, neither crushed nor ground	9	Mixture of juices
5	Black tea fermented	10	Jute bags and sacks

As discussed earlier, Nepal has been importing over 14 dollars for every dollar of export. The major import for Nepal is petroleum and the country that Nepal exports to the most is India. The tables and figures below are the glimpses of Nepal's major importing countries and products. These are also obtained from the data by Nepal customs and Trade and export promotion center. As shown in the figure below over the last 10 years, Nepal imported most from India; imports from China are growing; Argentina, USA, Canada, UAE and Indonesia are Nepal's major import sources. Nepal's major import items as are listed in table 4.

Figure 4 : Nepal's top importing countries

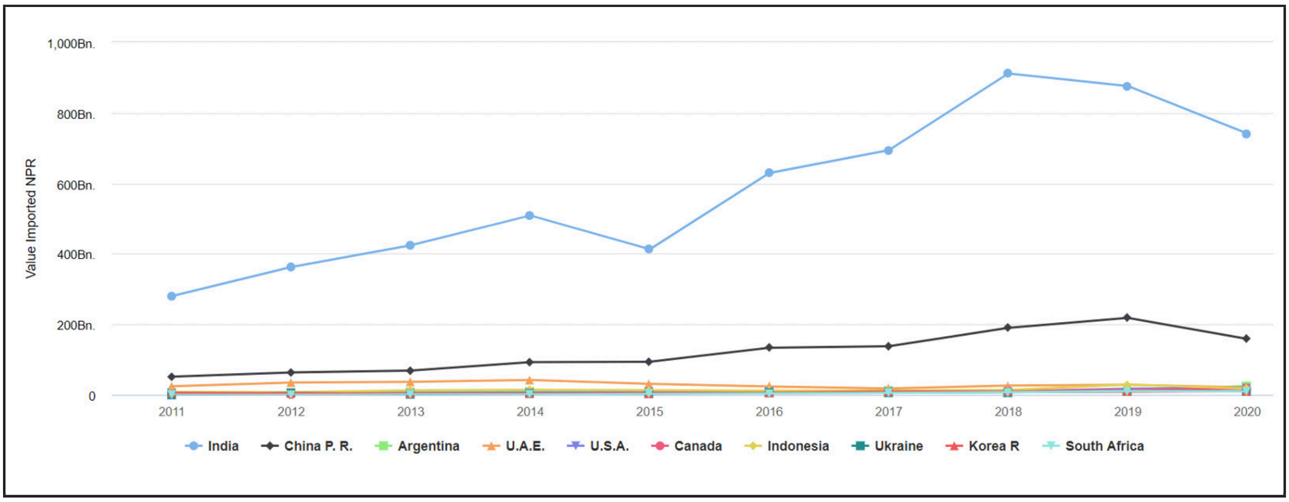


Table 4: Nepal's top imports

S.N.	Products	S.N.	Products
1	High Speed Diesel	6	Coal
2	M.S Billet	7	Flat rolled product of iron of a thickness less than 3mm
3	Crude soyabean oil	8	Gold, semi-manufactured forms
4	Telephone used for cellular or cordless networking	9	Semi-milled or wholly milled rice, whether or not polished or glazed
5	Motor Spirit (Petrol)	10	Liquidified Petrolium Gas (LPG)

While looking into the data and trade trends for Nepal for the past one decade, the following characteristics of Nepal's trade can be observed. First, the commodity pattern of imports and exports indicate that Nepal's foreign trade confirms the comparative advantage theory of international trade. The country's comparative advantage lies in labor intensive manufacturing and agricultural products (MoICS, 2016). This type of trade illustrates traditional theory of trade also known as 'inter industry trade.' Second, Nepal's foreign trade is India dependent. About two-thirds of Nepal's trade is with India. Third, there is a continuous deficit in Nepalese foreign trade. The volume of trade deficit is continuously increasing. Fourth, Nepal's share in total world trade has been declining. Fifth, Nepal remains dependent on a relatively small basket of exports and a few destination markets. These findings also align with the findings from Pant and Panta, 2019 & Thapa, 2019.

Furthermore, being a least developed country, Nepal enjoys the preferential market access under the WTO's enabling clause. This is a clause that most developed countries grant concessional and/or complete duty free, quota free market access to countries like Nepal under the General System of Preferences (GSP) scheme. This is one of the major reasons for Nepal's exporting to the US and European markets like France and Germany.

Comparative Advantage and Nepal's trade.

Nepal's export import data for over a decade shows that Nepal has been exporting a small basket of goods and services. This confirms that Nepal's trade is based on comparative advantage. The Nepal trade integration strategy 2010 and 2016 also confirm that the top 10 export items listed above belong to the group of commodities that Nepal has comparative advantage.

Comparative advantage is an economic theory first developed by 19th-century British economist David Ricardo that attributed the cause and benefits of international trade to the differences in the relative opportunity cost of producing the same commodities among countries. The (NTIS 2016) identifies that Nepal has a comparative advantage on fabric yarn, tea, cardamom, ginger and coffee in South Asia. However, the country has not been able to fully utilize its potential. Adhikari (2021)'s calculation of Revealed Comparative Advantage (RCA) shows that Nepal has comparative advantage in the production of 169 out of the 1,021 products, taken from WTO's HS 4-digit category.

Nepal enjoys comparative advantage in more products than the average countries. The products exported by Nepal are, on average, less ubiquitous than the products exported by most countries. The average ubiquity of the 169 products of Nepal's comparative advantage was found to be about 27.15. This implies that 26 other countries, on average, also enjoy comparative advantage in the products that Nepal exports with comparative advantage (Adhikari 2021). Yet Nepal is far behind on technology and the country's current productive structure is not competent as compared to its competitors.

In 2026, the United Nations Committee for Development Policy (CDP) will graduate Nepal from the least developed country to developing country, which means that Nepal would not be eligible for the LDC benefits. Consequently, the implications could broadly arise from (i) preference erosion in international trade potentially affecting export competitiveness, (ii) reduced policy space, tightening the scope of supporting exporters and domestic market-oriented industries (Razzaque, 2020). There is a need for an export strategy for Nepal in order to keep its export maker growing and unleash its competitiveness. The section below, is an attempt to see whether the free trade agreements would rescue Nepal's international trade after losing the GSP facility once graduated.

Free Trade Agreement and Nepal's Comparative Advantage

After its graduation to a developing country, Nepal needs to still secure the market for its export items. Literatures argue that free trade agreements would result in better market access for the products with comparative advantage. Gallardo (2005) confirms that specialization according to comparative advantage would indeed benefit a country. He also argues that free trade agreements are instrumental for a country to unleash the full potential of its comparative advantage. Furthermore, (IDB, 2003) confirms that free trade agreements eliminate the rule of origin tensions and also reduces the non-tariff measures for the goods with comparative advantage.

To estimate the role of FTA on Nepal's export, this study has used panel data of 10 major export destinations of Nepal between 2010 and 2019, as derived in figure 3. The study also included the top ten major export items of Nepal, derived from table 3, these products are also identified as the products Nepal has a comparative advantage in by (NTIS 2016). The data on export items are retrieved from the portal of Trade and Export Promotion Center (TEPC) of Nepal. Similarly, the data on Macroeconomic indicators—GDP, Inflation, population—are extracted from the World Bank database. Data on exchange rate are taken from the IMF database. The dummy variable Free Trade Dummy is taken from the estimation done by (Cepii—Database). The data on distance are extracted from (Pt. Bali info iklanindo semesta, 2019).

Methodology

The Gravity model of trade pioneered in the literature of international trade by Tinbergen (1962) is used to analyze the impact of FTA on imports. The model states that the size of the economies positively contributes to bilateral trade while their distance affects negatively. In addition, this study has employed the augmented gravity model of trade. As suggested by the literature, the model is further estimated using the Poisson Pseudo Maximum likelihood method (PPML). As PPML estimator function remedial measure to two particular issues in panel data of international trade: Non-homoscedasticity and zero trade values. (Silva & Tenreyro, 2006). The model estimated as;

$$\begin{aligned} Export_{ijt} = {} & b_0 + b_1 lnGDP_{it} + b_2 lnGDP_{jt} + b_3 lndistance_{ijt} + b_4 lnpop_{it} + b_5 lnpop_{jt} + b_6 inflation_{it} + b_7 inflation_{jt} \\ & + b_8 FTA_{ij} + b_9 Governance_{it} + b_{10} Governance_{jt} + b_{11} FTA_{ij} * Governance_i \\ & + b_{12} FTA_{ij} * Governance_j + \varepsilon_{ijt} \end{aligned}$$

where,

$Export_{ijt}$= Export of Nepal (i) to other countries (J) in time period t

$lnGDP_{it}$ = Log of GDP of exporter

$lnGDP_{jt}$ = Log of GDP of importers

$lndistance_{ijt}$ =Log of distance from exporter to the importer's capital city

$lnpop_{it}$ = Log of population of exporter

$lnpop_{jt}$=Log of population of importer

$inflation_{it}$= inflation of exporter

$inflation_{jt}$= inflation of importer

FTA_{ij} = FTA dummies 1 if both the countries are member of common FTA

$Governance_{it}$ = Governance of exporter

$Governance_{jt}$ = Governance of importer

$FTA_{ij} * Governance_i$= interaction between FTA and governance of exporter

$FTA_{ij} * Governance_j$= interaction between FTA and governance of importer

ε_{ijt} = Stochastic error term

Findings and Discussion

	(1)	(2)	(3)
VARIABLES	OLS	(FE)	(PPML)
Log of GDP of exporter in USD	4.341		2.309*
	(3.330)		(1.328)
Log of GDP of importer in USD	-3.820***	-3.910***	-0.269
	(1.096)	(1.197)	(0.659)
Log of population of exporter	-28.824		-23.16**
	(20.666)		(9.375)
Log of population of importer	4.905***	4.983***	0.975
	(1.004)	(1.092)	(0.631)
Distance to capital cities	3.844***	3.920***	1.763***
	(1.057)	(1.148)	(0.604)
Governance index of exporter	3.943***	3.979***	2.236*

	(0.574)	(0.604)	(1.192)
Governance index of importer	2.199		1.455***
	(3.765)		(0.382)
inflation (CPI) of exporter	0.118		0.0671**
	(0.153)		(0.0332)
inflation (CPI) of importer	-0.008	-0.013	0.00931
	(0.091)	(0.101)	(0.0433)
1 if both partners are member of common FTA			5.275***
			(0.949)
FTA_Governance_exporter			-1.394
			(1.136)
FTA_Governance_importer			3.359***
			(0.784)
Constant	392.483	1.908	335.4**
	(301.530)	(6.858)	(135.0)
	95	95	
Observations	0.558	0.545	100
R-squared			0.941
Standard errors are in parenthesis			

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Column 1 is the ordinary least square regression, column 2 is the time fixed effect and column 3 is the PPML estimator regression used to eliminate the effect of Non-homoscedasticity and zero trade values in panel data. The main variable of interest here was the free trade agreement, which is statistically significant for the export of 10 products that Nepal has comparative advantage on, to the countries that Nepal has been exporting in the last one decade. Among the list of the countries presented Nepal has a free trade agreement only with India, Nepal's exports to other countries are currently under the GSP quota, which will be eliminated as Nepal graduates to a developing country. The evidence from this regression shows that free trade agreement with its trading partner is statistically significant for Nepal.

Conclusion

This research shows that in the last 10 years, Nepal traded with almost 190 countries. The imported commodities ranged from basic goods to luxurious goods as well as labor intensive goods to capital intensive goods. Despite being an agriculture intensive economy and having comparative advantage on the agricultural products Nepal imported large amounts of agricultural goods from India and China. Such goods included meat, milk, rice, vegetables from India and onion, fish, butter, garlic, apples from China.

The import list did not show any input type commodities, it mostly shows that the country has been focusing on the consumer goods only; this also shows that there is very less production and value creation happening in the economy. In the exported items there is an overwhelming domination of woolen goods (carpets, woolen shawls, scarves, mufflers) and cotton goods (cotton dresses, suits) as well as agricultural products such as (cardamom, juice, tea, ginger and coffee). After graduating as a developing country, Nepal will lose its preferential market access and quotas to export which would result in increasing the cost of Nepali export and the demand for those items might not be as usual.

On the bright side as pointed out by Adhikari (2021), Nepal has a comparative advantage over 169 products; Nepal should focus on increasing competitiveness in light manufactured goods. Xu and Hager (2017) further confirm that Nepal can excel on light manufactured goods and handicrafts. Furthermore, to sustain and increase the current trade pattern on the exporting commodities with the comparative advantages Nepal should join the FTA with its current trade partners.

References:

Acharya, K. R. (2019). Nepalese Foreign Trade: Growth, Composition, and Direction. NCC Journal, 4(1), 91-96. ()

Adhikari, S. (2021). Addressing Trade Deficit of Nepal: Nepal's Productive Structure and Avenues for Diversification. Policy Research Institute. (10.13140/RG.2.2.23695.51366)

Cepii—Database. Retrieved April 27, 2021, from http://www.cepii.fr/cepii/en/bdd_modele/bdd.asp

Gallardo, J. L. (2005). Comparative advantage, economic growth and free trade. Revista de Economia Contemporânea, 9(2), 313–335. https://doi.org/10.1590/S1415-98482005000200004

(IDB, 2003), The impact of Free Trade Agreements on the Pattern of Trade, eeting of the Trade and Integration Network Inter - American Development Bank, Washington, D.C. MAY , 29 - 30, 2003, retrieved from (https://publications.iadb.org/publications/english/document/The-Impact-of-Free-Trade-Agreements-on-the-Pattern-of-Trade.pdf)

Ministry of Finance (2019). Annual economic survey May 2019, Research unit, Ministry of Finance, Government of Nepal. Retived from (https://mof.gov.np/uploads/document/file/Economic%20Survey%202019_20201125024153.pdf)

MoICS, (2016). Review of Nepal Trade Integration Strategy (2010),

Nepal Rastra Bank (2019). Quarterly economic bulletin, December 2019. Research and Statistics Department, Nepal Rastra Bank. (https://www.nrb.org.np/category/economic-bulletin/

quarterly-economic-bulletin/)

Nepal Rastra Bank (2020). Quarterly economic bulletin December 2020. Research and Statistics Department, Nepal Rastra Bank. ((https://www.nrb.org.np/category/economic-bulletin/quarterly-economic-bulletin/)

NTIS (2016). Nepal Trade Integration Strategy 2016. Ministry of Industry Commerce and Supplies, Government of Nepal.

Pant, B., & Panta, R. K. (2009). Export diversification and competitiveness: Nepal's experiences. NRB Economic Review, 21, 52-78.

(Pt. Bali info iklanindo semesta, 2019), https://www.company-isting.org/pt_bali_info_iklanindo_semesta.html

Razzaque, M. A. (2020). Nepal's Graduation from the Least Developed Country Group: Potential Implications and Issues for Consideration. United Nations, ESCAP.

Silva, J. S., & Tenreyro, S. (2006). The log of gravity. The Review of Economics and statistics, 88(4), 641-658.

Thapa, S. B. (2019). Nepal's Trade Flows: Evidence from Gravity Model. NRB Economic Review, 24(1), 16-27.

Tinbergen (1962). Tinbergen, J. (1962). Shaping the world economy; suggestions for an international economic policy.

Trade and Export Promotion Center, Department of Commerce, Nepal (https://nepaltradeportal.gov.np/web/guest/data-visualization).

World Bank (2020), Ezemenari,Kenechukwu Maria; Joshi,Nayan Krishna; Blum,Florian Michael; Varela,Gonzalo J.; Ganz Carulla,Federico.2021. Nepal Development Update: Harnessing Export Potential for a Green, Inclusive, and Resilient Recovery (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/332751617996242148/Nepal-Development-Update-Harnessing-Export-Potential-for-a-Green-Inclusive-and-Resilient-Recovery

Rethinking the Industrial Enterprise Act

- *Ayushma Maharjan*

Nepal has a long history of being amongst the poorest countries in the world. Even today, about 39 percent of the population in Nepal are either extremely poor or are at the risk of being one. With about 5.7 million people in the country being employed in the informal sector, the incidence of poor who earn mere $1.9 to $3.2 a day is exceptionally high in Nepal. Additionally, the per capita income of Nepal (US$1090) is amongst the lowest in South Asia.

One of the major reasons behind this desolated outlook of the general Nepalese is stringent policies that has deprived many individuals of their right to earn a decent livelihood through self-enterprising. While pursuance of entrepreneurial endeavors has helped many people around the globe to exit poverty, significant barriers to enterprising have barred Nepalese from realizing the same. Over the past few years, many countries have taken phenomenal steps to improve their enterprising environment by reforming their policies to catch-up with the rapid advancements around the globe. On the contrary, all that Nepal has experienced is lack of interest on part of bureaucrats to move beyond what has been practiced for countless number of years.

For over many years now, Nepal has been a victim of archaic, stringent and excessive legislations that have created significant barriers for individuals to pursue their entrepreneurial ideas. For instance, the Industrial Enterprise Act (IEA), which has been abated or obsolete in many countries including neighboring India, has still been creating obstacles for entrepreneurship and innovation in Nepal. With each passing year, the scope of the act has only broadened, making the regulatory environment more stringent and restrictive.

It cannot be denied that during the liberalization era (1990s) of Nepal, the introduction of the IEA was a phenomenal achievement which provided opportunities for numerous people to establish and operate their enterprise by registering themselves at the Department of Industry (DoI). But today, the world is moving from the concept of industries to companies, and from companies to platforms, and the regulatory environment needs to incorporate these advancements. This implies that the continuation of archaic policies would contribute to creating more inadequacies and bottlenecks towards enterprising. Given that, the IEA of Nepal is perhaps a legislation that warrants some form of discussion and possibly requires a different approach.

For the same, analyzing the intentions of the act and exploring alternatives that cater to the objective is just as important.

Understanding the Industrial Enterprise Act of Nepal

Nepal, in the mid-1950s, embraced a state-led development strategy where the government undertook the responsibility to run economic activities and provide employment to the general people. This phenomenon was explained by Rodrik (2004) by stating that the general belief during the earlier periods of the 20th century was one of skepticism as to the potential of markets. This belief was especially relevant in least developed and developing nations of the global south where the general norm for escaping poverty traps for a larger part of the 20th century had been prolonged stages of government intervention or a system of planned economic affairs - to the extent that public enterprises were plenty and private sector participation in any economic affairs minimal. Such structure of governance had visible results in terms of increased poverty, balance of payment deficits, growing unemployment rates, among others which gave rise to a new era; one propelled by a fundamental belief that government failure is a bigger evil than market failures (Rodrik, 2004). Privatization, private sector participation, deregulation in terms of both doing away with unwanted legislation and from regulatory capture, and opening of boarders became the new norm post second half of the 20th century (Kessides, 2004).

Nepal's own experience conforms to this phenomenon, with reforms particularly in terms of deregulation and greater private sector participation beginning only as far back as 1989. This first generation of economic reforms in Nepal was propelled by the lackluster performance of public enterprise and the overall state of the economy (Khatiwada & Acharya, 2003). During the time, some sweeping reforms were instituted and different acts and policies were promulgated to ensure greater private sector participation in the economy.

A crucial reform for Nepal during the 1990s, which obliterated one of the most prevalent economic orthodoxies of the time, was the enactment of new industrial policy which was introduced with a vision to abolish license raj and facilitate the participation of private sector in the economy and to attract foreign investment. It was followed by the enactment of the Industrial Enterprise Act on November 1992 to enforce the vision (Pradhananga, 2007).

The act proved to be one of the most important legislations on business and investment in Nepal which expanded economic opportunities to individuals other than those that were, or were related to the ruling class. It made possible for countless number of people to establish and operate an industry based on a registration requirement at either the Department of Industries or Department of Small Cottage and Small Industries based on the nature of the business activity (Pradhananga, 2007). The Industrial Enterprise Act in Nepal was thus introduced to enable individuals to participate in economic activities and to contribute to economic growth of the nation with the realization that the state is not omnipotent and private sector participation is imperative to attain economic prosperity.

During this period, attributable to the absence of legislations regarding limited liability companies, the IEA classified industries based on the nature of operation, and capital of the entity. It served as an essential tool for providing legal status to entities and for availing any facility and concessions accorded by the government of Nepal. In order to provide specific incentives to industries that were deemed as important for employment generation, like tax and credit concessions and relaxation of compliance requirements, the act provided an exhaustive list of businesses based on their nature of operation. The incentives and concessions provided by the IEA were specifically designed as per the nature of operation of businesses. For instance, manufacturing industries were provided the facility of input tax credits upon export of products, while many of the regulatory compliance requirements were relaxed for small and cottage industries. The act also consisted of a list of businesses that required additional approval from Department of Industries before registration, like business activities that were deemed of national importance such as production of weapon, and defense projects.

The clauses mentioned in the then Industrial Enterprise Act facilitated the then entrepreneurial environment and was necessarily a step in the right direction pre-supposed on the belief that necessary changes would be made in light of the changes to come in the future. This implied that after the advent of different relevant policies like the Companies Act, the scope of IEA should have been reduced. On the contrary, today, the act regulates almost all types of businesses in Nepal. The broadened scope of industrial enterprise act and its existence amongst a plethora of other legislation means that the compliance and cost for registering and operating an enterprise in Nepal has only increased over time. The barriers that IEA has been creating towards enterprising is against the notion on which the act was first established.

The Current Impact of Industrial Enterprise Act in Nepal

Three decades have passed after the enactment of the first Industrial Enterprise Act in 1992. In the given time, the act has been replaced twice, but with each subsequent amendment its scope has become broader – the number of companies regulated by the act has expanded.

The current provision of company registration in Nepal as per the Companies Act requires all companies to be registered at the Office of Company Registrar for legal recognition. However, in order to acquire operating license, the companies need to be re-registered at the DoI under the IEA. The IEA has classified 8 broad sectoral categories and 167 sub-categories under which these companies need to be registered. This diverges into two implications – all companies that fall under the sectoral classification need to re-register themselves at the DoI and need to comply with the legislation and only those companies that fall under the sub-categories are acknowledged. Both can be regarded as a primary barrier for enterprising and innovation in Nepal.

The intention behind the classification of companies in the IEA at the moment seems to be to follow in the footsteps of the erstwhile IEA, 1992, that is, to provide incentives and concessions based on certain regulatory compliance. However, IEA has failed to comprehend that specifically detailing out the businesses that require industry registration undeniably sends a signal to regulatory agencies and bureaucrats that any business or venture not mentioned in the sub-category is a non-permitted activity.

Given that, all companies, from ferocious metal producers to food stalls and beauty salons need to be registered as an industry in Nepal, and need to comply with the same complex and costly registration procedure, which can take indefinite period of time. There are instances where it has taken more than 30 days for industrial registration alone. Meeting all compliances - company registration, acquiring special permits, licensing and tax registration imply that it takes six to seven months on average for a business idea to materialize in Nepal. Citizens from all corners of the country need to travel to the federal capital for a majority of these processes. However, this still does not guarantee success. For instance, founders of a potential company 'XYZ' (name not revealed on purpose) wanted to create a platform for tourism enterprises to connect with their customers. But such a platform had never been seen before, and were not classified under the IEA. Despite visiting multiple agencies and hiring eleven lawyers, the company failed to get registered. With no guarantee of success, as seen in the case of company 'XYZ', that is too high a degree of uncertainty and forgone opportunity for an average Nepali that makes a mere $3 a day. For them, the security of a menial job, however little it pays, far exceeds the cost of uncertainty.

In another case, Lorik Prasad Yadav, a local of one of the poorest regions in Nepal where everybody engages in subsistence agriculture, came up with an innovative idea to free up time for his fellow villagers. Where women walk four hours every day just to make it to the mill and back, he purchased a tractor and installed a mill on it to offer door-to-door service. Faced with a disruptive competition, stationary mill operators colluded and lobbied with the government to shut down Lorik's enterprise. Their weapon of choice – the mandatory provision of having to produce a business's permanent address to the Department of Industries (DoI) before it can be deemed as a lawful enterprise. As a mobile mill operator, Lorik could not comply with the legislation. In a world that is fast changing with unforeseen levels of advancements in technology, the IEA in Nepal is creating hindrances as the people try to lead a prosperous life. The IEA completely disregards the fact that innovations can move faster than legislators.

It is apparent that the broadened scope of IEA is obstructing innovation in Nepal. It is especially difficult for small and medium enterprises and start-ups to comply with the legislation. Should an aspiring entrepreneur get past these legislative barriers, all is still not rosy. Semi-annual reporting to the DoI, mandatory Corporate Social Responsibility, additional permissions for expansion or change in nature are some more burdens that await the entrepreneur. Ironically, a policy that was first enacted as Nepal entered a period of liberalization now poses a threat to innovation.

Consequently, Nepal has seen an upsurge in informal enterprises, which accounts to approximately 60 percent of the economy. Many others opt for partial legality – registering only under Companies Act. As such, they try to avoid falling under the government's radar. However, this has its own implications.

The companies that fail to register at DoI under IEA are not eligible to receive many of the facilities that are granted to Industries[1], like income tax exemption for certain years from the date of operation, facility to receive tax credits on input costs, and land acquisition facility, to name a few. This practice of providing concessions to only those businesses registered as industry, in essence, provides an unfair advantage to existing industries. While the existing and established industries will be subject to additional benefits, the new companies will have no support to compete and sustain. As a result, in the absence of any concessions and facilities for innovative practices, existing industries can shield themselves from a much-needed competition, which can decrease their incentive to innovate.

1 The general consensus now is that enterprises need not register themselves as an industry even if they as mentioned as an industry in the Industrial Enterprise Act, however it is merely a practice adopted by the Department of Industries as concerns with regards to the time taken for registration of industries and post registration compliances were raised by the private sector and not explicitly stated in the IEA. IEA requires business activities mentioned in the Annexes of the act to be registered as Industries.

Also, innovative businesses after failing to register themselves as an industry have limited avenues of finance. The informal or partial legal status of the companies will make it difficult for them to access finance through formal channels. Additionally, in order to bring in foreign investment in Nepal, it is mandatory for companies to be registered under IEA[2]. Essentially, with restrictions in accessing capital for enterprising, these companies have no prospect of scaling up.

The aforementioned arguments indicates that IEA is creating significant barrier towards enterprising in Nepal, especially for small and medium enterprises. Furthermore, its role in contributing to factors like discouraging innovation, limiting competition, increasing informality, and limiting access to finance has hindered the growth of both the nation and its people.

Rethinking the Industrial Enterprise Act

Given the inflexible and unbending nature of the IEA towards the most recent needs of the general Nepalese, amendment of the existing provisions to limit its scope seems to be the most prudent alternative.

A familiar system of industry registration also exists in India. However, the Indian practice is visibly simpler with only five categories of industry requiring registration. This number has steadily decreased since 1991[3] with mere 18 businesses requiring industry registration instead of all companies.[4]

Fundamentally, the rationale for industry registration stems from the need for a higher degree of standard for safeguarding public health. Consider the following example, a business that manufactures ferocious metals must have in place some mechanism that ensures (i) protection of the workers from potential hazards during the manufacturing phase (ii) protection of the environment from possible emissions and (iii) protection from any hazards that a consumer of such product may face. In such a circumstance, some form of standard would indeed be required which a) requires adherence by the business and b) imposes a duty on part of the regulatory agency to ensure that such standards are followed. Not all businesses however would require such higher degree of standards, for instance, a beauty salon. What follows thus is quite simple – only those businesses that manufacture products that would require a higher degree of standard for public and environmental safety require registration as an industry. Other businesses can, in-fact, proceed only with the remaining registration requirements.

An argument for the removal of such redundant provision of industry registration can also be made based on the fact that sectoral licensing requirements distinct from the industry registration process are already present in Nepal. This connotes that the goal of ensuring the imperative safeguards for companies that actually need to be registered as an industry is already put in place and other form of companies should be allowed to do away with the industrial registration.

For the same, the current IEA needs to be amended by the Ministry of Industry. Section 2 of the act which mandates registration of all companies at the DoI needs to be reformed such

2 See Foreign Investment and Technology Transfer Act, 2019
3 See Industrial Development Regulation Act, 1951 of India and its subsequent amendments and notification
4 Amendments in Industrial Development Regulation Act, 1951 in India were part of a series of reforms that were initiated in 1990s as part of the liberalization process.

that this registration is optional. The annexure which consists of the 167 sub-categories of enterprises should also be reformed into a much shorter list of enterprises that have implications on public and environmental safety. Enterprises that are not specifically covered in this annexure should be acknowledged as not requiring DoI registration altogether. Furthermore, the tax and concessions should be based on the size of capital of the business rather than the proof of industry registration. This would require, tax and concessions to be provided through the Income Tax Act and Finance Act of Nepal rather than the IEA.

The amendment will also have another significant implication. Currently, the local and provincial governments of Nepal are preparing their own IEAs. However, there are limited options on part of sub-national governments to address issues pertaining to industrial development within their own territory, as their legislation cannot contradict with the federal law.[5] A limitation therefore, to the scope of the IEA, could act as a catalyst for the sub-national governments to come up with their own policies, paving way for a healthy policy competition among local governments. There is also a greater chance for inter-governmental learning and knowledge transfer through the possibility of seven unique policies and inter-linkages to be formed between provincial governments and business sector.[6]

Should the said reforms materialize, the huge capital and energy that would otherwise be consumed for registration procedure could be utilized to putting innovation and ideas to test. In a country where, 1500 young people go to the gulf region every day in search of economic opportunities, such will be a sign of a country providing opportunities for youngminds to experiment, learn and work towards earning decent livelihoods in their homeland.

Bibliography

Evans, P. (1995), Embedded Autonomy: States and Industrial Transformation, Princeton, NJ: Princeton University Press

Stigler, G. (1971), The Theory of Economic Regulation. The Bell Journal of Economics and Management Science, 2(1), 3-21. doi:10.2307/3003160

Kessides, I. (2004). Reforming Infrastructure : Privatization, Regulation, and Competition. Washington DC: World Bank and Oxford University Press.

Kharel, P., & Dahal, K. (2020). Small and Medium-Sized Enterprises in Nepal: Examining Constraints on Exporting. Manilla: Asian Development Bank.

Khatiwada, Y., & Acharya, M. (2003). Structural Adjustment Policies and Poverty Eradication. Kathmandu: Institute for Integrarted Development Studies (IIDS).

Ministry of Commerce and Industry. (1951). Industrial Development Regulation Act. Government of India.

Ministry of Industry, Commerce and Supplies. (1991). Industrial Enterprise Act. Government of Nepal.

Ministry of Industry, Commerce and Supplies. (1992). Industrial Enterprise Act. Government of Nepal.

5 See Constitution of Nepal. Bagamati Province, Gandaki Province and Province 1 have enacted Industrial Enterprise Act, however, the act is identical to the Federal Law.

6 This is crucial in terms of creating an industrial policy that is embedded with a network of private enterprises. See for instance Evans, P, Embedded Autonomy: States and Industrial Transformation, Princeton, NJ, Princeton University Press, 1995.

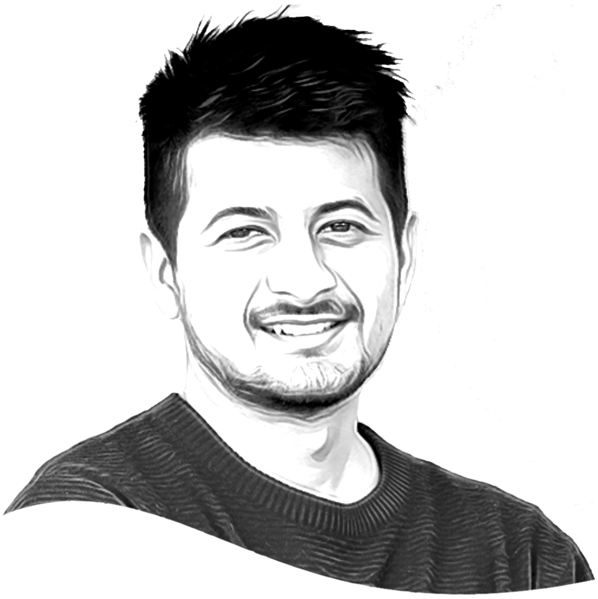
Ministry of Industry, Commerce and Supplies. (2020). Industrial Enterprise Act. Government of Nepal.

Ministry of Industry, Commerce and Supplies. (2019). Foreign Investment and Technology Transfer Act. Government of Nepal.

Ministry of Law, Justice and Parliamentary Affairs. (2015). Constitution of Nepal. Government of Nepal.

Pradhananga, M. (2007). A Review of Trade and Industrial Policy in Nepal. Kathmandu: South Asia Watch on Trade, Economics & Environment (SWATEE).

Rodrik, D. (2004). Industrial Policy for the Twenty-First Century. Cambridge, Massachusetts: Harvard University.



Ride-sharing Businesses: Nature and Regulation

- *Yatindra K.C*

I. Introduction

The concept of sharing economy revolves around turning used or underutilized assets into productive resources facilitated through peer-to-peer marketplace over the internet (Ducci, 2020). Naturally, a great deal of firms have found success in what has somewhat been wrongly termed as "sharing economy". Sharing, connotes a romantic ideal of collaborative and anti-corporatist exchanges. In reality however, the sharing economy is controlled by multibillion dollar corporations with profit minded goals that have little to do with sharing ((Lobel, 2018). Nevertheless, despite its nature, it has indeed facilitated exchanges, reduced fixed costs, transaction costs and resulted in consumer surplus. All businesses that operate under this model fall under the category of sharing economy.

Till date, two distinct business practices can be said to have gained the most success through the emergence of sharing economy. One pertains to the provision of short-term lodging offered by house-owners in a manner akin to hotels/motels while the other pertains to provision of transportation services by private vehicle owners. In both cases, an external firm often termed as aggregator exists which facilitates transactions between potential suppliers and consumers for a small percentage of the transaction (commission).

Despite the misnomer it carries, sharing economy nonetheless has proven itself to have a range of efficiencies. More specifically, sharing economy is efficient on three fronts: i) reducing transaction costs ii) efficient pricing mechanism and iii) efficient allocation of resources. These efficiencies have been well documented and even tested to say the least. To that extent it need not be reiterated.

The emergence of such marketplace however has been met with differing practices across several jurisdictions. While some have sought to facilitate it, others have simply applied pre-existing regulations to the newly-formed marketplaces[1]. The latter case seems to have been fueled by political opposition from established competitors. Critics of the marketplace and incumbents of the current marketplace cite numerous issues such as taxes, rights of third parties and safety of the consumers as a justification for imposition of regulation. Indeed, some regulation may be required despite the efficiencies accorded by

1 Case in point being the use of taxi regulations in the ride sharing marketplace.

the newly-formed market. However, the crucial question remains as to the design. The answer to such question remains the fundamental goal of this paper. More specifically, in the sections to follow, only one business i.e. ride sharing under the broader gamut of the sharing economy will be analysed in this endeavor.

II. Ride-sharing and traditional transportation industry

It must be stated at the very outset that the term ride-sharing is also a misnomer. While in its strictest sense, ride-sharing would connote a business which simply acts as an intermediary to facilitate individuals travelling on the same route by allowing them to share the costs of the travel and/or the vehicle in question, the current model however is more akin to sourcing of rides and hailing of rides through the use of the intermediary for a certain fee in the form of commission. In that sense, companies such as Uber, Pathao, Tootle can be appropriately termed as e-hailing services or ride-sourcing services. However, given its prelevant use, the term ride-sharing is used throughout the paper.

The emergence of such companies has proven to be disruptive to the transportation industry. On average, the cost of travel has reduced as traditional transportation services have been forced to lower their fares owing to the growing popularity of ride-sharing businesses. Additionally, the use of private vehicles to accord transportation services has also meant reduced fares in comparison to traditional transportation services as there are no fixed costs associated with ride-sharing which is the defining feature of a sharing economy. Moreover, the efficiencies existent in the sharing economy has also resulted in increased consumer surplus. However, ride-sharing businesses have been met with opposition from the market players of the traditional transport industry. There has been greater call for application of the regulation of traditional transportation industry (fare and quantity) to ride-sharing businesses given the similarity in services accorded.

For decades transport regulations, specifically taxi regulations, have sought to regulate prices as a justification for correcting market imperfections i.e. information asymmetry and anti-competitive practices, and the quantity supplied as a justification for limiting negative externalities i.e. congestion and pollution (Cetin & Deakin, 2017). Empirical evidence, however, points to the ineffectiveness of such regulations and yet they continue to exist in many jurisdictions. Perhaps, such existence is affirmation of the claim, "regulation is a product of the marketplace like any other, and it is acquired by industries and is designed and operated solely for their benefits" made by George J Stigler in his seminal work, "The Theory of Economic Regulation (1971)". Interestingly, regulations are often justified for the purpose of advancing public interest and correcting market imperfections, yet their effects to a larger degree have been solely the opposite.

In an ideal situation, the exchange between buyers and sellers would lead to optimum allocation of the resources central to the exchange and its price. However, inherent imperfections often lead to less than optimum allocation. Indeed, correction of such imperfection can also arise through the marketplace. But the risk of such correction not happening or being delayed is so tantamount that some form of intervention is often sought. Such intervention is sought from an entity that has coercive power to enforce the said intervention i.e. government. Nonetheless, many instance of the recent past point towards the failure of said interventions in correcting imperfection. Part of the reason why the said occurs is the relative lack of knowledge on part of the intervening force in understanding the marketplace. In other words, this is the information asymmetry between the regulated and the regulator (Beesley & Glaister, 1983). As such, a "one size fits all" regulation leads to a less-than-ideal situation. As one would expect, regulation of the sharing economy and more specifically regulation of firms providing transportation network facilities as part of the sharing economy, must not envision application of pre-existing transportation regulation. It therefore becomes essential to first understand the nature of the market place in order to regulate it for the purposes of limiting its imperfections.

III. The design of ride-sharing businesses

Ride-sharing businesses center around three principal players – the platform, which provides the marketplace, and the buyers and sellers who transact on it (Einav, Farronato & Levin, 2016). In addition to this, it facilitates the use of underutilized asset in a productive manner. In case of ride-sharing, the underutilized asset is the private vehicle (Ducci, 2020). The role of the platform is facilitating the exchange between buyers and sellers through the use of technology.

The platform can take one of three structures – one-sided model, hybrid model or a pure two-sided model. Each structure has its own implication regarding regulation owing to its fundamental characteristics. What will be clearer through further deliberation is that most ride-sharing businesses take the form a hybrid model distinct from one-sided model and a pure two-sided model and additionally characterized by a centralized pricing mechanism.

In a pure two-sided model, the platform's role is limited to an intermediary. Independent drivers, through the use of platforms, are matched with the consumers, and many of the crucial decisions are made by the drivers and consumers themselves. In a pure two-sided model, the drivers set the parameters of price to be charged and in theory, multiple drivers could have multiple parameters. The platform in this instance performs the function of matching drivers to the consumers, and the efficiency of the platform will depend upon the thickness of

Alternative structures in ride-sharing business

One-Sided Model	Hybrid Model	Pure Two-Sided Model
Vertical integration through employment of drivers or autonomous vehicles	Hybrid contractual arrangements on the supply side including centralized pricing with independent drivers; forms of employment based on commissions; partial vertical integration (competition between independent drivers and employed drivers or autonomous vehicles)	A competitive marketplace for independent drivers and passengers

Source: Ducci (2020)

the platform itself. In that sense, a major role of the platform is creating thick networks to take benefit of the indirect network externalities.

As Ducci (2020) appropriately stated, the pure two-sided model was not feasible in case of the traditional taxi industries owing to information asymmetries and large transactions. However, the model of sharing economy has changed many of these assumptions. The decrease in search and bargaining costs has resulted in lesser transaction costs while there exists greater asymmetries in information owing to the use of technology. The platform can earn its fees as a facilitator by charging an annual subscription fee. The central feature of this model remains the delegation of key powers to the drivers and consumers, especially the power to set prices which often leads to competition between drivers.

The one-sided model is characterized by vertical integration between the platform and the drivers. Additionally, the drivers are employees of the platform. This model is closer to the authorized online retail businesses such as the Apple store.

Hybrid marketplace is distinct from a single-sided platform. It allows parties having unused asset to transact with potential buyers as opposed to facilitation of retail business through the use of platforms. Additionally, it is also distinct from a pure-multi-sided platform where the platform only acts as a marketplace having minimal role in matching buyers and sellers (Ducci, 2020). Ride-sharing businesses as Ducci (2020) correctly pointed out, operate on a hybrid model of platform which is characterized by contractual agreements between the platform and the driver, the platform and the rider, and the driver and the rider. As opposed to a pure two-sided model, in the hybrid model, certain restrictions are placed on the users of the platform. While in a pure two-sided model the platform would only act as a facilitator, in the prevailing hybrid structure, some form of control is retained by the platform in the form of pricing mechanism which is determined by a complex algorithm. Additionally, unlike the one-sided model, the drivers are not employed by the platform; they are as is in the case of two-sided model, free to work in any number of platforms they choose. Pricing mechanism is retained by the platform, and it can even be argued that platform is better suited to determine the equilibrium fare because of its enormous capacity to process large amounts of data pertaining to rides requested and available drivers. This hybrid structure is crucial for designing regulations.

Traditional transportation regulations have, to a varying degree, sought to eliminate particular imperfections. Price fixing and licensing requirements are among the chief tools used to regulate the said industry (Joskow and Rose, 1989). Although a ride-sharing business indirectly offers transportation services, their design is such that they have eliminated imperfections that would otherwise arise in the traditional transportation industry. The sections that will follow will discuss more on the imperfections of the traditional transportation industry, the regulations sought and the elimination of such imperfections in the ride-sharing business.

IV. Information asymmetry and the call for price regulation

George Akerlof's paper, "A market for lemons: Quality Uncertainty and the Market Mechanism (1970)" was a revolutionary scholarly work that examined the effect of limited information on part of one party to the transaction over the entirety of the market for such good. Markets function better when both parties have sufficient relevant information. However, it is rarely the case. Often, the seller has more information, which leads to problems of adverse selection where the incentives in the market favor low quality; if the problem is severe enough, the market itself may dissolve (Akerlof, 1970).

Information asymmetry is also a problem of the transportation industry. The driver has more information about the route of travel and the actual cost of travel. Absent the same information on part of the customer, the driver can overcharge. A correction of this measure is sought through a predetermined fare system. The rationale that follows thus is that predetermined price gives more information about the cost of the ride to the customer (Cetin & Deakin, 2017).

The problem of information asymmetry that pertains to the transportation industry is not applicable in its entirety to ride-sharing businesses. While one would expect information asymmetries to exist in the sharing economy vis-à-vis the ride-sharing business, the growth of sharing economy clearly points otherwise. To a larger degree, there is more information available to both the driver and the customer. This has happened because ride sharing platforms over the years have made use of the available technology to make information as symmetrical as possible. In the current scenario, both the driver and the customer know before-hand the cost of the trip which is displayed in the application software developed by the platform. Moreover, pricing models reflect the demand and supply of the particular moment, which serves as an essential tool for matching potential buyers and sellers.

Aside for the asymmetry in relation to the price of travel, a further asymmetry also exists in terms of the quality of the product itself; in case of ride-sharing, the quality of the transportation vehicle. Only the rider can know about the quality of their vehicle and absent any mechanism for inspection or quality control, a situation akin to one presented by Akerlof can possibly exist. Additionally, the unique structure of the sharing economy creates a multisided informational asymmetry i.e. the driver does not know of the passenger and vice versa.

Sharing platforms vis-à-vis ride-sharing businesses rely largely on building thick networks i.e. large number of buyers and sellers and maintaining the thickness of the network in order to gain network externalities. To that extent, trust among buyers and sellers is an essential part of the business model. As opposed to the traditional model, in case of ride-sharing very little opportunity to inspect the quality of the vehicle exists. Therefore, trust becomes an essential factor in facilitating exchanges. Although the existence of information asymmetries cannot be denied in the sharing economy and many of its business models, the success of such businesses also points towards amelioration of asymmetries. Businesses such as ride-sharing have been quick to make use of technology as a means to establish mechanisms that establish trust and create greater information for both the riders and consumers to access.

The mechanisms used are of two types. To the first category belongs the use of rating system, where both the rider and the customer can rate each other on a variety of parameters. These ratings in-turn showcase the desirability of a particular rider or a customer based on an average of ratings and reviews received and assignment of number ranging from 1 to 5 with 1 being the least and 5 being the most desirable. Platforms and its users can also make use of third-party rating agencies, which can offer an unbiased review. Moreover, as the ratings themselves can reflect on the desirability of the platforms, there exists a greater incentive for platforms to act on the basis of the feedback received in order to maintain its thickness.

To the second category belongs the use of minimum standards to be fulfilled before entry. Platforms themselves can impose some minimum criteria which can include proper vehicle condition, no known criminal history, credit history etc. These are more direct interventions which seek to promote trust by buyers and sellers by sending a signal about the quality of the platform. In that sense, the platform substitutes the reputation of buyers and sellers for its own reputation (Federal Trade Commission, 2016).

While rating systems do not eliminate the information asymmetries existent, they seem to ameliorate asymmetries to such a degree that markets tend to function better and more efficiently. In fact, a large number of empirical researches also suggest that rating systems influence buying behavior and weed out potentially fraudulent activities. To that extent, price regulation as a justification for limiting information asymmetry cannot be envisioned in the making of any policy concerned with the regulation of ride sharing businesses. Likewise, maintaining the current system of price description before-hand and rating system must be given continuation or even deemed to be mandatory.

V. Negative externalities and the call for limiting supply

Negative externalities generated by transportation vehicles are of two kinds. The first pertains to the level of congestion created by an additional vehicle and the second relates to additional pollution, both air and noise. To tackle such externalities, regulatory agencies have used licensing mechanisms that a) limit the supply of the vehicles and b) require certain minimum standards to be existent in the vehicles. The latter requirement does very little harm; in reality minimum standards often send out a signal of safety to the consumers. The same however is not true with regards to limiting the supply of vehicles.

Restrictions on entry to the transportation market have been found to increase the monopoly rents gained by the pre-existing players of the marketplace (Çetin and Eryigit, 2013; Koehler, 2005; Eckert, 1973). Moreover, the structure of the market itself becomes monopolistic in nature because entry restrictions themselves increase the cost of licenses required. In addition to this, rent seeking results in distortionary effect of the regulation itself. Naturally, it also leads to pre-existing licensee lobbying to protect their interests.

Sharing economy however, as stated earlier, revolves around the use of underutilized asset. In other words, in case of ride-sharing, the existing vehicle finds a newer use i.e. private vehicle being used to offer transportation services or for commercial purposes. In contrast to the traditional transportation industry, the owner of the vehicle uses the vehicle for both private purpose and public purpose, as opposed to the use of vehicle in the transportation industry for only public purpose. The resulting effect is such that, an additional vehicle is not added, but rather the same vehicle is used for two purposes. Moreover the problem of congestion is reduced, albeit not eliminated altogether. To that extent, a certain charge for congestion can be levied which will lead to proper allocation; restrictions on supply nonetheless must be avoided altogether.

The underlying feature of the sharing economy vis-à-vis ride-sharing also leads to reduced fixed costs which are the central basis for offering of services at a competitive price. More so, when the fixed costs are reduced in addition to ease in entry, the monopoly rents charged also get reduced, leading to greater consumer surplus. It therefore seems only essential and logical to allow multiple uses of the same asset, i.e. use of private vehicles for public purposes, something which is outright prohibited in most jurisdictions.

While licensing requirements lead to reduced consumer surplus and monopolistic nature of the marketplace, it also serves a key function in the form of collection of data as to the number of operators. The importance of such data cannot be denied; it may range from taxation for congestion or levying of certain fees, to ensuring a form of check in cases of any criminal activities. To the aforesaid extent of such use, an enlistment certificate can be given out as is practiced in Bangladesh. Regulations however must ensure the balance between, the collection of data and the relative procedural hassle in providing such information, with special focus on reducing the latter.

VI. Anti-competitive practices, consumer protection and regulations

Innovation that is disruptive, greatly benefits consumers, yet many regulations have come that burden innovation and become a formidable barrier to entry and entrepreneurship. On the other hand, any business cannot be permitted to carry out or engage in deceptive and unfair practices for the sole reason that they foster innovation (Federal Trade Commission, 2016). Regulations therefore need to protect consumer interests while also being able to foster innovative practices. Against this backdrop, regulation is justified for limiting anti-competitive practices and furthering consumer interests.

Acquisition of monopoly power is perhaps the most extreme form of anticompetitive power; naturally regulations often seek to limit it. Nonetheless, the measures used may be inefficient to the extent that it limits competition altogether rather than promoting it. Regulations therefore have been justified in the transport industry specifically where firms operate a dispatch system for transport[2] owing to the assumptions of existence of natural monopolies[3] as a form of market failure. The tool used is price regulation/fare regulation. However, such assumption has been proven to be wrong.

It might therefore be of crucial importance also to determine whether or not natural monopolies in the sharing economy vis-à-vis ride-sharing business can exist. Undeniably, a platform for sharing economy such as the ride-sharing platform creates an indirect network externality, i.e. change in benefit or surplus, that an agent derives from a good when the number of other agents consuming the same good changes. In the case of ride-sharing, the addition of one driver would reduce the waiting time for customer, while the addition of one customer reduces the idle time for drivers. If such externalities are strong and continue to add value even at a large network size, the dominant platform will be the one with larger network and eventually, such platform may be the only one efficient to provider of the good, thereby creating a natural monopoly (Ducci, 2020).

However, the continuation of positive network externality giving rise to natural monopoly is implausible. Although it may be required to

2 Firms that operate radio taxi services, with a large fleet under their ownership.

3 A natural monopoly arises when average costs are declining over the range of production that satisfies market demand. This typically happens when fixed costs are large relative to variable costs. As a result, one firm is able to supply the total quantity demanded in the market at lower cost than two or more firms—so splitting up the natural monopoly would raise the average cost of production and force customers to pay more (Principles of Economics, 2016).

scale operations during the initial phases of operation where increasing the number of consumers and drivers both help build reliable network and reduce waiting times, after a certain point the network externalities become negligible[4] such that they will not give rise to natural monopolies (Ducci, 2020).

A key feature of the sharing economy is non exclusivity i.e. the users of the platform can interchange between platforms. This applies to both the supplier and the consumer. For instance, in case of a ridesharing business, the driver is free to operate on multiple platforms, while the consumer is also free to choose their service from multiple platforms. The benefit that accrues from this mechanism is that it promotes competition which inevitably leads to lower fares charged. However, it is also in the best interest of the platform to promote exclusivity because platforms rely on developing large and reliable networks for their revenues. Given that positive network externality is generated as the size of the network expands, platform may pursue mechanism to maintain exclusivity which makes the market less competitive. Regulations therefore have a great role to play in fostering competition by outright prohibiting any form of mechanism that leads to exclusivity.

With regards to protection of consumers, many jurisdictions have mechanisms in place. These mechanisms relate to legislations pertaining to contractual obligations and tortuous liability in case of any harm or injury. Such mechanisms can indeed be given continuity, and to a larger degree, will be applicable to ride-sharing businesses after all the business is signified by a contractual relation between all parties.

VII. The common area of regulation of transportation industry and sharing economy

Despite the differences between the transportation industry and sharing economy platforms offering matching services, there are nonetheless some similarities between the two that call for application of similar regulations in both industries. In fact, relevant experts in the field of sharing economy will agree that ride-sharing businesses and traditional transportation industry offer similar services, which calls into question the common applicability of regulations concerning the safety of the passengers/consumers. Specific regulation such as passenger liability insurance, background checks of the drivers will therefore be applicable in both cases.

However, sharing economy often blurs the line between personal services and professional services accorded and therefore it becomes harder to apply regulations based on personal safety which was largely designed for professional services i.e. taxis to a marketplace that provides personal services i.e. private car owners providing taxi services in their personal capacity (Federal Trade Commission, 2016). Tailoring of regulations in this light therefore becomes important, an approach that can be taken will focus around using the platforms own rating system coupled with the specifically designed safeguards for consumer protection that reflect the personal nature of services accorded.

4 For instance having three vehicles that could match a single passenger's request or having fifteen vehicle match a passenger's request does not create any substantial difference.

VIII. Specific area for regulation

Sharing economy platforms operate over the medium of internet, and as part of their operations, they require collection of large amounts of data pertaining to all participants of the marketplace. This gives rise to justified concerns regarding a person's privacy. To what extent should data be collected, the purposes for which it can be used, confidentiality of data collected, are all crucial questions that are fundamental to the operation of the platform itself. Concerns about privacy are however not unique to platforms. They are, as a matter of fact, applicable to all entities working over the internet and to entities that require some form of information to carry out any transaction. As such, platforms can be seen as having fiduciary relationships with the users which includes duty to act in the best interest of the users established through a relationship based on trust on economic dependency (Federal Trade Commission, 2016). However, some form of safeguard despite the establishment of fiduciary relationship is required.

Several researches (see for instance Xi et al, 2014; Sweeney, 2002; Niels et al, 2012; Sanchez et al, 2015) have provided models that can address privacy concerns while ensuring that matching of users of the platform remains intact. Although, such models can increase costs incurred on part of the platform, not ensuring concerns relating to privacy can result in loss of revenue given the competitive nature of the market and non-exclusivity of users. Regardless of such incentive to adopt mechanisms for maintaining privacy, some form of minimum standard that balances concerns of privacy and the need for information by platforms to operate efficiently is also required.

IX: Concerns for Level playing Field and Regulatory capture

Misguided government regulation can often be a burden to innovative practices. The model in which ride-sharing businesses operate is one of sharing economy. Many of the aspects in relation to regulation of the sharing economy vis-à-vis ride-sharing businesses are yet to be carved out. The situation is a result of the evolving nature of the business itself and the initial and the nascent stage of the model in which the business operates. A natural threat in this instance is incumbent seeking protectionist measures in order to protect their own markets. The threat of regulatory capture and entrants into the ride-sharing business lacking resources to fight back can lead to consumers not being able to reap the benefits of disruptive innovation (Federal Trade Commission, 2016).

In jurisdictions where the transportation industry is heavily regulated in terms of entry and fares, a natural concern regarding the competitive advantage accorded to ride-sharing businesses through non-applicability of pre-existing regulation arises. Ride-sharing businesses may gain an unfair competitive advantage derived not from superior foresight, skill, or business acumen, but from unequal regulatory treatment or from application of separate set of rules or spontaneous private deregulation (Federal Trade Commission, 2016). It is even suggested that all competitors within a market should face the same regulatory circumstances. However, the key differences between the two industries make it difficult for application of similar rules. Moreover, applications of similar rules can in reality take away the distinctiveness of the marketplace itself. The excessive regulation placed on the traditional transportation industry has undoubtedly led to massive entry costs. In light of such costs, a concern is often raised by the incumbents of traditional transportation industry in relation to the remuneration of such costs and the unfairness resulting from the absence of such costs in the transportation industry. In that case, regulators could indeed tone down on the regulations imposed on the traditional transportation industry as a means to create a level playing field. It has been widely recognized and proven that regulation of the transportation industry only leads to reduction in consumer surplus and acquisition of monopoly rents.

Incumbents will indeed suffer significant losses owing to their high fixed costs. However, the potential economic benefits to all the parties involved is substantially high enough to warrant doing away with regulatory measures of an era bygone (Deighton, 2018). Regulations should focus on preserving the uniqueness of the newly-formed market instead of seeking to establish fairness and equal treatment. Alternatively, it has been suggested that if the question is equity more than equal treatment, some partial form of compensation can be given out through non regulatory measures (Deighton, 2018). Such an approach will take the form a levy on all rides accorded for a certain period of time (see for instance the practice in Melbourne and Sydney)

X: International practices in relation to regulation of ride-sharing businesses

Practices relating to ride-sharing have varied across jurisdictions. While countries like Estonia and Finland have established facilitative regulations, at the other spectrum lies France that has outright banned the operation of such businesses. These varying practices have, to a larger degree, resulted from difficulty in establishing rules of operation distinct from the traditional transportation industry. Extensive lobbying from the incumbents of taxi industry and calls for equal treatment between both businesses have meant that ride-sharing businesses have had to operate in jurisdictions that have recognized the distinct characteristics of business model.

When regulatory regimes have accommodated ride-sharing business, they have often included substantial reductions in the extent of regulation applicable to traditional taxi industries in order to establish an equal footing. Moreover, a fundamental question that most regimes face in regulating ride-sharing businesses is whether it is best to establish a single regulatory regime for taxis and ride-sharing business or whether two different regimes should be established. While the nature of services accorded clearly establish arguments for a single regulatory regime, the nature of business points otherwise. Geradin (2017) argues that some fundamental differences between taxis and ride-hailing make it difficult to design a single regime that efficiently addresses both. He suggests that different regulatory requirements may be needed but argues that consistent approaches should be adopted as far as possible. An example of this approach is that of India, which identifies several categories of public transportation under the Motor Vehicles and Transportation Act 1998, with aggregators being one of them.

In almost all jurisdictions with regulations in place for ride-sharing, the common theme has been the application of similar rules to both the traditional transportation services and ride-sharing in areas that would require common regulations. These pertain to the application of minimum vehicle standard, mandatory insurance coverage and appropriate license. While some jurisdictions have left these rules to be enforced by the platform themselves others have followed a licensing regime.

Under a federal structure, sub-national governments have taken charge in regulating ride-sharing businesses. Federal governments have assumed the responsibility of providing guidance to sub-national governments in order to ensure a consistent approach. The case for regulation through sub-national governments remains very strong given the varying needs of states can be better addressed by state governments.

Some key practices of Asian states in relation to ride-sharing businesses

India

The Motor Vehicles Act of India broadly classifies vehicles into two categories:

1. Vehicles for transportation which includes subcategories
   a) Public Use Vehicle
   b) Private Use Vehicle: can be used for commercial purposes in so far as it is related with immediate business of the owner but is not allowed to be used on hire
   c) Contract carriages
2. Vehicles not for transportation which includes vehicle registered for personal private use. Such vehicle cannot be used for commercial purposes.

Ride sharing businesses are termed as aggregator which is defined as a digital intermediary or marketplace for a passenger to connect with a driver for the purpose of transportation. Prior to 2016, most aggregators were operating under the Information Technology Act 2000. In 2016 however, the committee comprised to review existing taxi policy recommended aggregators also be registered as agents or canvasser under the Motor Vehicles Act 1988. Given the federal nature of India and the fact that transportation falls under the concurrent list, states are bound by the 1988 Act but are free to formulate their own rules without deviating from the federal Act. Naturally, the committee report followed a non-binding guideline being published by the Ministry of Road Transport and Highways, which was adopted verbatim by many states of India. Interestingly, all vehicles to be used within the platform of aggregators are vehicles that must be registered for commercial purposes i.e., under the subcategory of vehicles for transportation. The committee report also acknowledges bike-sharing as a valid option and proposes fostering them. Quite a few states have taken note of this and allow bikes to provide taxi-like services provided they are registered as contract carriages under the Motor Vehicles Act and follow other criteria which include proper license plate number, separate attire for identification and following of minimum standards. The following table provides a summary of aggregator adopted by states.

Summary of key rules adopted by states in relation to ride sourcing applicable for four wheelers

State	Title of Act/Rule	Key Policy/Regulation							
		Licence Requirements	Permit	Driver Qualification	Driver's Working Hours	Data Sharing/ Storing	Operations	Fare Regulations	Others
Karnataka (Transport Secretariat, 2016)	The Karnataka On-Demand Transportation Technology Aggregators Rules, 2016	Minimum 100 taxis with permit holders	Covered with a contract carriage permit	Have a valid commercial driving licence to drive a taxi and have a valid PSV badge	As stipulated by Motor Transport Workers Act 1961	Maintain records of all the taxis regarding trips made, passengers travelled and fare collected	Permitted to operate on multiple platforms	Shall not be higher than the fare fixed by the Government	Maintain a call centre and a web portal with all details of ownership, services offered, fare structure, control room number, etc.
Maharashtra (Home Department, 2017)	Maharashtra City Taxi Rules, 2017	Have registered office in the area of its operations	Shall be operated under "App-Based City Taxi Permit"			Copy of the bills should be maintained for three months	Shall not pick up passengers by street hailing	Fare cap applicable only for the vehicles with engine capacity less than 2000 cc	GPS/ GPRS-based tracking service be fitted in vehicles
West Bengal (Transport Department, 2015)	Directives for On Demand Transportation Technologies Aggregators, 2015	Minimum 50 consent letters from permit holders of public service vehicles	A valid permit issued by the authority	Appropriately registered and licensed	Permitted to log on and off at their discretion	Data stored on the server have to be shared with the authority as and where required in the public interest	Permitted to operate on multiple platforms		Annual structured training program

Source: App Based Shared Mobility: An exploratory survey, 2020

Thailand

Two-wheeler vehicles operated largely in the informal sector providing taxi-like services. The transport legislation of Thailand also restricted the use of private vehicle for commercial purposes. Since 2004 however, steps to formalize the business have taken place. An amendment to the transport legislation was made in 2005 which created a new category of vehicle i.e. public motorcycle which can be used for transportation purposes. Ride sourcing business however remains a gray area in Thailand with regulations being proposed and plans for implementation within this year.

Bangladesh

Like most countries, Bangladesh too restricts the use of private vehicle for commercial purposes. However, with the popularity in demand for ride sourcing services particularly of two wheelers, regulations establishing the legality of the business have been made. The Ride-Sharing Service Guideline, 2017 (Date of enforcement, 2018-02-22) allows ride-sourcing services to operate but they have to either be a public limited company or a private limited company and need to register with the Bangladesh Road Transport Authority and obtain Ride-Sharing Service Company enlistment certificate, while riders need to get a Ride-Sharing Motor Vehicle Enlistment Certificate. A VAT of 5 percent is levied on the services and a license fee is also charged.

Almost in all instances where ride-sharing has found some legality in relation to their business practices, regulations remain quite the same. A private vehicle is not allowed to operate for commercial purposes. The justification is the nature of commercial activity; which demands certain additional requirements. These requirements as stated earlier are vehicle fitness since the services accorded to any passenger must not include the services of faulty vehicle resulting in threat of bodily harm, coverage of insurance and appropriate background checks. To that extent, in many jurisdictions, the practice of using a specific category of vehicle as opposed to any private vehicle is prelevant. Identification of such vehicle is predominately done through the use of color coded number plates. Most jurisdictions however, have adopted a hybrid approach, allowing private vehicles to be registered for commercial purposes provided they meet certain standards. In such instance, the requirement for providing transportation services is obtaining a commercial purpose license for the vehicle and meeting background check requirement (which is optional depending on the jurisdiction in question; most jurisdiction have delegated this authority to the platform itself), other regulations such as taxi operator license, route permit, fare regulation are not applicable.

XI. Ridesharing in Nepal

Ridesharing in Nepal has found a great deal of success in recent years. Much of it can be attributed to the inadequacies present in the traditional transportation industry. It has opened up new avenues of income for many and true to the nature of sharing economy, ride sharing business (specifically motorbike sharing) in Nepal has allowed for a productive use of underutilised asset in the form of two-wheeler vehicle. Additionally, such use is also conferred in a personal capacity rather than a professional capacity. As was the case with most jurisdictions, ridesharing was also met with some form of prohibition. Such prohibition pertained to the restrictions placed on the classification of vehicles and the use of vehicle beyond the scope of its classification[5].

This practice is however as seen above is not unique to Nepal. In reality, in many jurisdictions, vehicles are classified according to their use. Inherent in such classification are some minimum standards required for the scope of work pertaining to the classification. Indeed, such minimum standards are required in furtherance of the interests of the consumers. Nonetheless, maintaining minimum standards themselves does not require changing the category of vehicle. The standards that are

5 Motor vehicle and transport Management act of Nepal, classifies motor vehicles into different categories. One such category is Private vehicle, as is the case with many of her South Asian Counterparts, identification of such vehicle is done through a distinct number plate. A vehicle classified as private vehicle cannot offer transport services as per the afore said act, in order to provide transport services, it must be registered as a Public vehicle.

meant for furtherance of consumer protection can be called to be applicable for vehicles participating in the ride sharing business without having to change from one category to another. A hybrid approach can be followed in this regard – one that requires the existence of minimum service standard for engagement with any platform offering ride-sharing services. In essence, the platform can be delegated the responsibility to ensure service standards. After all, it is in their best interest to ensure that vehicles on their platform meet safety checks.

Changing of the category of vehicle will in reality go against the idea that connotes the sharing economy, for after categorization, the underlying vehicle becomes a specific purpose asset as opposed to an underutilized asset and the service rendered itself becomes a professional service. Moreover, the services rendered by the participants of ride sharing business are on a part-time basis which points to the fact that a majority of participants have other avenues of income and further their income by associating with ride-sharing platforms. As such, a crucial question to answer is whether ride-sharing businesses will attract the same amount of participants on the supply side when the vehicles used are subject to identification based on number-plates. The answer will depend on the number of people who would want to identify as professional transportation service provider and see ride-sharing as a full time opportunity. If the number of such people is low, the supply will be restricted and prices charged will be higher.

Additionally, under a federal structure, the negative externalities generated by ridesharing services may not be uniform across all seven states. It will depend on the total volume of paved roads, the total number of vehicles, and the purchasing power of the consumers. As such regulatory approach will vary according to the underlying conditions of the states themselves. Furthermore, motor-vehicle taxation is the greatest source of revenue of states, and motor vehicle regulation also falls under the jurisdiction of states. Naturally, regulatory supervision of ridesharing businesses must also fall under the purview of states.

The issue of employment is also of critical importance. Given the nature of the sharing economy and the non-exclusivity of participants, it becomes very hard to classify the participants at the supply side of the ride-sharing business as employees. It has long been contested that the drivers that participate in the ride-sharing business are not employees for the sole reason that the assets are the driver's own and that they are free to work for multiple platforms. Naturally, many obligations in case of traditional employer-employee relationship do not arise. There has been a greater call in recent years, to do away with the 20th century classification of employee-employer relationship as we move towards an era of reduced transaction costs. Growing consensus among experts exist in relation to the difficulty in application of older regulations to newer economic models. Nonetheless, the issue of employment also highlights the importance of context in deciding how to regulate[6]. The question why statutory protection is needed and for impositions of what rights and duties is it needed become relevant. Consequently in answering these questions, it may benefit from delinking them with the 20th century model of single employer (Lobel, 2018). For instance, if the goal is appropriate remuneration, the participant will have first-hand information of remuneration of each trip and such remuneration will only reflect the dynamics of demand and supply. If the question is about social protection, the question is whether it is applicable for part-time services or do they need to be rendered full time. Some policies

6 See for instance the case of O'Connor V Uber Techs. Inc

should, regardless of the economic model, extend to all workplaces regardless of the status of those offering their labour, for instance anti-discrimination laws (Lobel, 2018).

A key issue that is linked with ride-sharing scenario in Nepal and other jurisdictions is the heavy regulations placed on the taxi industry. The regulations like most taxi regulations are fare regulation and supply restrictions. The result of such has been the decrease in producer and consumer surplus and the charging of monopoly rents. Additionally, it has also meant that the cost of acquiring the license for taxi has been very high and so has fixed costs of offering taxi services. Naturally, taxi entrepreneurs have resisted the legalization of ride-sharing businesses, and have called for the application of similar regulations.

An interesting thing to note here is that taxi operators do-not face competition from four-wheeler ride-share services. The Nepalese market place has instead seen a surge in two-wheeler ride shares, partly due to higher fares in the taxi industry and partly due to the relative ease with which two-wheelers can navigate through the intense traffic obstructions during peak hours. The two-wheelers used are private vehicles and rides are offered on a part-time basis by the owners of the vehicles. The model of the platform is hybrid. The laws of Nepal, however, restrict the use of private vehicles for commercial purposes. Commercial purpose vehicles have a distinct identification system and have stricter requirements in addition to heavy regulation being placed which has naturally made the cost of entry higher. Naturally, incumbents have resisted the newly established competitors, some because they want to continue charging monopoly rents, others because they want to cover their fixed costs.

The concern for a level playing field between the taxi industry and ride-sharing business has been gaining traction in the recent times. Multiple protests from the taxi-entrepreneur's association raises a crucial question as to whether regulators should focus on preserving the uniqueness of the market place or whether among competitors a level playing must be established. In case the regulators seek to do both, the taxi industry will need to be deregulated. Additionally, if the concern regarding the higher fixed costs of the incumbents is serious enough, a form a transitionary mechanism can be used. Such a mechanism will allow only licensed taxis to offer four-wheeler ride-sharing services for a certain period of time[7]. However, the risk of regulatory capture will be existent.

XII. Concluding observations

In his seminal work, "What have we Learned from Market Design?" Alvin E Roth (2009) identified three crucial characteristics of an efficient market, a) they must be thick i.e. substantial number of participants must exist on both sides, b) must able to overcome the congestion thickness it brings i.e., it must be possible to consider enough alternative transactions to arrive at good ones, and c) it must be safe and simple to transact. Sharing economy vis-à-vis ride-sharing businesses reflect these characteristics to a varying degree. The current players in Nepal have been able to attract substantial number of participants while daily transactions are substantial enough to suggest low congestion, safety and simplicity in transacting. As efficient as they may be, their operation until a few months ago was deemed to be unlawful. With the recent high court (15th march 2022) ruling however, ridesharing businesses have received

7 Two wheeler services will continue to be in operation, however private four wheeler vehicle can be restricted for a certain period of time to offer ride-share services.

some form of legal validation. The ruling also calls for implementation of proper policy that enables the business. As such, the structure of the marketplace that is to be regulated becomes of utmost importance for it is the structure that will shed light into some imperfections that may arise and whose corrections might be required.

Within the current structure, the ride sharing business is efficient; regulation of the industry therefore should focus on preserving such efficiency which will require a newer approach, one that is distinct from the current approach of regulation of transportation industry, regardless of the similarities that may exist between the two industries. Nevertheless, some common area of regulation will also exist as was discussed earlier. On other instances, the intention behind old methods of regulation will be needed to be ascertained. On a related note, the question of changing the category of vehicle, congestion taxes, other related fees will also require careful evaluation. The entity best suited for such evaluation under a federal structure will undeniably be the provinces.

Works Cited

Agatz, N., Erera, A., Savelsbergh., M., & Wang, X. (2012). Optimization for dynamic ride-sharing: A review. European Journal of Operational Research, 223(2), 295–303.

Akerlof, G. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. The Quarterly Journal of Economics, 84(3), 488-500. Retrieved July 10, 2020, from www.jstor.org/stable/1879431

Beesley, M. E., &. Glaister, S.(1983). Information for Regulating: The Case of Taxis, The Economic Journal, 93(371), 594–615

Cetin, T., & Deakin, E. (2017). Regulation of Taxis and the rise of Ridesharing. Transport Policy: http://dx.doi.org/10.1016/j.tranpol.2017.09.002

Cetin, T., & Eryigit, K.Y. (2013). The economic effects of government regulations. Transport Policy, 25(1), 167-177

Ducci, F. (2020). Ride-Hailing Platforms: Natural Monopolies in Digital Platform Markets. Global Competition Law and Economics Policy, 97-125.

Eckert, R.D., (1973), On the Incentives of Regulators: The case of taxicabs, Public Choice, 14, 83-99

Federal Trade Commission. (2016). The Sharing Economy: Issues facing Platforms. Participants and Regulators. Federal Trade Commission.

Joskow, P.L., Rose, N.L., (1989), Economic Regulation and its effects, In: Schmalensee, R., Willig, R.D. (Eds), Handbook of Industrial Organization, Elsevir, 1450-1505

Koehler, B. (2005). License Values in taxi Markets. Econ Aff, 25, 52-54

Lobel, O. (2018). Coase and the Platform Economy. In N. M. Davidson, M. Finck, & J. J. Infraca, The Cambridge Handbook of the Law of the Sharing Economy (pp. 67-77). Cambridge: Cambridge University Press.

OpenStax Economics, Principles of Economics. OpenStax CNX. May 18, 2016, http://cnx.org/contents/69619d2b-68f0-44b0-b074-a9b2bf90b2c6@11.330.

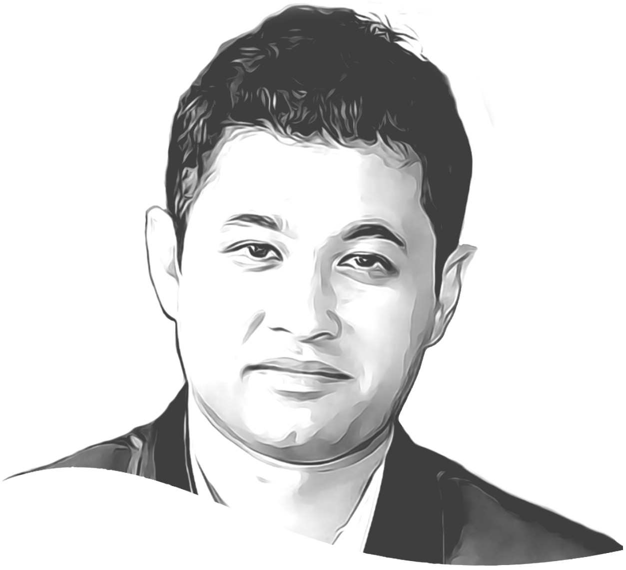
Roth, A. (2009). What Have We Learned from Market Design?, Economic Journal, Royal Economic Society, 118(527), 285-310

Sánchez, D., Martínez, S., & Domingo,

J.F., (2016). Co-utile P2P ridesharing via decentralization and reputation management. Transportation Research Part C: Emerging Technologies, 73, 147–166

Stigler, G. (1971). The Theory of Economic Regulation. The Bell Journal of Economics and Management Science, 2(1), 3-21.

Xi, Y., Schwiebert, L., & Shi. W. (2014). Privacy preserving shortest path routing with an application to navigation. Pervasive and Mobile Computing, 13, 142 – 149



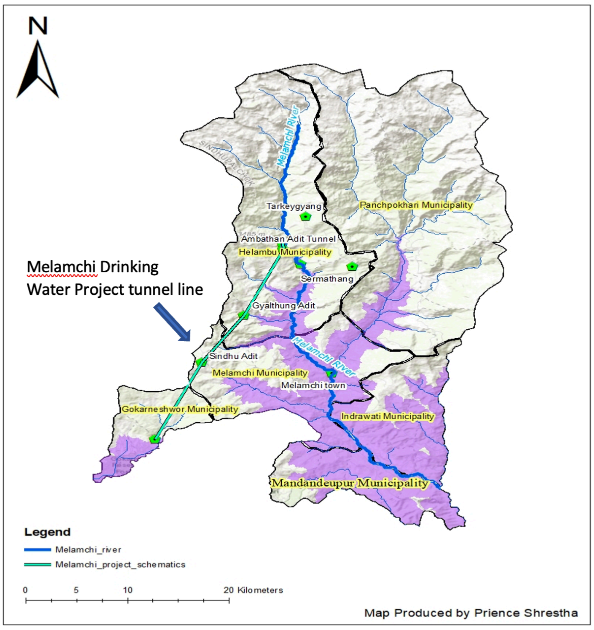
Markets for Dispute Resolution: A case of Melamchi Drinking Water Project

- Prience Shrestha

Melamchi Drinking Water Project and the Dispute Unfolding

Only recently, Melamchi Water Supply Development Board (MWSDB) has completed the first phase of the subproject – 1 (transmission aspect) of the Melamchi Drinking Water Project. The project that took about three decades to complete after its inauguration currently pledges to supply 17 million liters of drinking water per day (ml/d) to denizens of Kathmandu city through bulk and retail distribution infrastructure that fall within the scope of subproject – 2 (distribution aspect) of the Project (MWSDB, 2021). Meanwhile, the second phase of the subproject – 1 pledges to divert water from other river systems originating from the Langtang glacier to transmit an additional 34 ml/d of water for further distribution in Kathmandu City (MWSDB, 2021).

The current construct of the Melamchi Drinking Water Project draws a significant proportion of stream water from the Melamchi river through 26 kilometers (km) tunnel originating and diverting the river from a small locality called Riverma (also named Ambathan) located at Ward No. 1 of Helambu Rural Municipality (RM) (MWSDB, 2021). In regards to this, the local residents and the representatives of the Helambu RM grieve over their perception that the project undertaken under the authority of the federal government has failed to solicit representation of the local community hosting the river system while also undermining the effect of the river diversion over the socio-economy of the downstream local water users (Sherpa, 2021). In short, the residents and the representatives of Helambu RM complain about the federal government unrecognizing the customary rights of the local people over the water flowing through the Melamchi river. In return or for compensation for the water being diverted from the Melamchi River, the local government of Helambu RM demands certain fees or royalty in proportion to the sale of water that is being diverted daily from the Melamchi River (Sherpa, 2021).



This case makes a typical representation of an awaiting dispute concerning the reallocation of water resources through the construction of tunnel infrastructure. The case represents a single instance of a probable dispute concerning water resource ownership or rights in a locality that may be observed nationally in the future amid the operation of multiple water diversion infrastructures around the country.

At present, the federal government has pledged to construct large-scale infrastructure projects to secure drinking water needs for growing urban centers and furnish specific irrigation and electricity projects. Not to mention, eight of Nepal's 21 national pride projects directly concern water infrastructure that attempts to divert the natural course of river systems and is ultimately likely to affect water availability for prior local water users (National Planning Commission, 2021). In the meantime, there exist provisions of royalty payments, revenue sharing, and redistributions for reallocation of water resources of a given water body for hydroelectricity generation to compensate the prior users of such water resources[1]. But such provision remains inexistent regarding reallocation or diversion of water resource for irrigation and drinking water supply (NNRFC, 2020).

As such, it is ironic that there remains the provision of royalty-based compensation for non-consumptive diversion of water resources for hydroelectricity generation that technically allows sufficient return flow of water downstream while no provision for reward or compensation exists for consumptive diversion of water resources for irrigation and drinking water supply with least to no arrangement for return flow.

Adjudication of Water Rights as the resolution

The prevailing case concerning grievance of the residents of Helambu RM and other likely disputes that may arise as the result of water diversion projects affecting perceived ownership and rights of local community over a body of water can be effectively addressed or precluded by justifiable apportionment or adjudication of a particular body of water among prior users of water, local community, and sovereign authority based on the doctrines of water right aspired or adopted. This resolution appears particularly suitable for diverting water bodies other than for hydroelectricity generation as there is no royalty provision for compensating local communities from diverting water resources for such purposes.

However, it is important to note that the proposed resolution does not address fair compensation for environmental damage, relocation/resettlement need, and other socio-cultural and economic damages

1 See schedule- 4 of Intergovernmental Fiscal Arrangement (IGFA) Act, 2017

directly attributable to the installation of water infrastructure projects. Instead, the resolution is specific to protecting the assumed ownership of concerned stakeholders over a body of water and guaranteeing compensation or reward whenever such rights are assumed to be infringed. Meanwhile, certain clauses accompanied with the specific doctrine of water rights adopted can also effectively preclude the amount of water diversion that can damage instream services to preserve the local ecosystem and sustain recreational benefits.

Introducing Water Rights

Prescription for adjudication of water rights of water bodies among the concerned stakeholders or contesting parties is dependent on the particular doctrine of rights adopted/ aspired along with certain clauses that can accompany the adopted doctrine – other than if the federal or provincial governments choose to allocate water rights unilaterally. However, such unilateral arrangements can be inefficient and might garner retaliation from multiple concerned stakeholders (Saleth, 1998).

On such grounds, literatures guide towards two primary and important water rights doctrines known as (I) Riparian doctrine and (II) doctrine of Prior appropriation.

- **Riparian doctrine**

  Riparian doctrine links ownership of or reasonable water use (i.e., usufructuary rights) of the adjacent or overlying lands (Rosegrant & Binswanger, 1994). As such, rights to water use are granted to the individuals or community whose land is located adjacent to the particular body of water (i.e., lakes, ponds, or river streams). The justification for the Riparian doctrine could have been primitively established on the grounds that the individuals and community living adjacent or over the body of water are often the traditional users of water, and therefore are implied with the customary ownership or rights over the water.

  However, the evolution of laws in modern times has required rights over a particular body of water at a certain quantity and proportion based on the Riparian doctrine to be justified by the reasonability of the water use. As such, individuals and communities who are qualified to claim rights on a certain body of water based on the Riparian doctrine also need to justify the water's use for a perceived beneficial purpose. The evidence of it can be referred to when the erstwhile Republic of Texas, in 1840 AD, embraced the English common law that gave all landowners adjacent to streams the right to use surface water as long as their diversions were reasonable (Griffin, 1998).

- **The doctrine of Prior Appropriation**

  In contrast to the Riparian doctrine, the doctrine of Prior appropriation (or occupancy) establishes claims or rights on a certain body of water based on the earliest use of water. This doctrine that grants first call on available water to earliest water users despite not being adjacent (or relatively distant) to the body water was first adopted in England from Roman Law (Howe, 1998). This doctrine to establish water rights was later widely adopted in the Western United States of America (USA) to resolve conflicts over water between miners and farmers during the gold-rush era as miners were already transferring a significant amount of water to minefields afar from the water bodies (Colby, 1998).

While the modern interpretation of prior appropriation doctrine is also based on the date of the first use, the initial appropriation and subsequent transfer of water from a water body must be proven to have been used for beneficial purposes. And, the number of water rights to be adjudicated either volumetrically or proportionally (recognized in terms of the number of shares of water rights) is often based on various scientific considerations. For instance, the standard of Practically Irrigable Acreage (PIA)[2] has been famously deployed in multiple water-related dispute settlements and inscribed in water laws across Pan America to adjudicate water rights for agriculture producers (Howe, 1998). According to the standard, farmers are provided with sufficient water rights equivalent to the water needed to grow crops on every irrigable acre of their farms (Howe, 1998).

Likewise, the prior appropriation doctrine should also be accompanied by the 'loss doctrine' or 'sleeper doctrine' (Livingston, 1998). Particularly in the system of loss doctrine, the water rights must be continually used to be valid as nonuse shall be interpreted as "abandonment" or "forfeiture" of rights. For example, the Mexican water law requires water rights to be always exercised within three years to avoid automatic forfeiture (Thobani, 1998). Whereas the 'sleeper doctrine' preserves passive ownership of water rights that have not come to consumptive or non-consumptive use (Livingston, 1998).

While the idea of sleeper rights appears counterintuitive in the pretext of doctrine privileging the rights to water based on productive usage, it is essential to note that such rights often represent undisturbed water useful to fulfill instream services and maintain the local ecosystem (Livingston, 1998).

Role of Organizations and Institutions in establishing Water Rights

It requires a legitimate institution to establish a particular water rights doctrine at the national, provincial, or basin level. Such institutions facilitate the adoption of a specific water rights doctrine accompanied by certain clauses and facilitate equitable & justifiable allocation of water rights across the contesting parties either volumetrically or proportionally. Furthermore, they also establish the classification of rights and facilitate the establishment of other user-based associations to carry out functions concerning water reallocation and trading.

The chronological evolution of water rights in the State of Texas[3] during the early nineteenth and mid-twentieth century exemplifies the prominent role of government authority in adopting water doctrines followed by adjudication of water rights among the concerned stakeholders. However, the initiative undertaken a century earlier needs to be absorbed with caution as the modern democratic culture of the society may not support unquestioned federal or State/provincial allocation of water-based property rights. But it cannot be disregarded that adjudication of water rights of a particular water body or river basin can effectively begin via a legitimate, capable, and sufficiently representative institution or organization.

Reallocation of water through the process of Water Markets

The earlier section of the study discussed the idea of justifiably allocating rights to water

2 See Weldon (2000) to learn about the limitation of the use of PIA standard in Indian Reservations of THE Western USA

3 See Griffin (1998) to learn the historical details of evolution of water rights in the State of Texas

among the concerned stakeholders and contesting parties based on the reasoning of the adopted water doctrine and clauses accompanying it. Such is recognized to protect the allocated ownership of the beneficial water users regarding a particular water body from diversions that may infringe such ownership rights. In subsequence, this section shall dwell upon the process of water markets or water trading to facilitate reallocation or leasing of such water rights to optimize the beneficial use of the water resources present in a water body or river basin.

The idea of optimizing the use of water resources through water markets appears counterintuitive in respect to the earlier argument that the establishment of water rights already enables the beneficial allocation of water resources. But it is important to note that the optimal allocation or the most beneficial use of water is frequently changing, and even the most senior rights[4] attributed for a particular purpose do not guarantee the greatest net economic benefit (Livingston, 1998). As such, through the medium of water markets and the water trading process, it can guarantee the tendency towards the maximum beneficial use of water, assuring the highest user surplus even by enabling the provision for senior water rights to be traded (Livingston, 1998).

In our particular case of brewing dispute in regards to diversion of Melamchi river for fulfilling drinking water needs of Kathmandu city between the local community of Helambu RM and federal drinking water authorities, the establishment of water rights based on a particular doctrine and clauses can facilitate diverse ownership of the water resource between contesting parties. At the same time, the provision of water markets can facilitate the reallocation of such rights between irrigation use, commercial use, and drinking water use when necessary.

Benefits of Water Markets

While the benefit of water markets to facilitate the reallocation of water rights to achieve maximum economic benefit and user surplus has been hinted, literatures discuss myriad benefits of water markets for efficient and effective reallocation of water.

Rosegrant & Binswanger (1994) have suggested that efficient water allocation can be achieved by creating incentives that support the effort to reallocate water or the delivery of water rights. Such appears imperative in areas observing scarce water supply where literatures suggest that significant potential economic efficiency can be achieved from voluntary reallocation of water or water rights among the users (Easter, Dinar, & Rosegrant, 1998). Such voluntary reallocation is ultimately achieved by the medium of water markets that guarantee voluntary trade of water rights via the mechanism of price and negotiation. Technically, water markets incentivize water rights owners to conserve water and sell the surplus to those willing to pay a satisfactory price, thereby allowing water to be reallocated to higher-valued uses (Thobani, 1998). The establishment of water markets ensures the reallocation of water through the medium of trade to achieve the maximum user surplus possible (Hearne, 1998). Meanwhile, potential buyers of water rights also have a strong incentive to conserve water to keep their costs to a minimum (Thobani, 1998).

Furthermore, water markets are also known to accelerate the economic growth of developing and underdeveloped economies (Thobani, 1998). By incentivizing the allocation of scarce water resources to be redeployed for more productive purposes, they increase output and employment (Thobani, 1998). Meinzen-Dick (1996) found that water markets increased the availability of water and the reliability

4 See Livingston (1998) to learn about the classification of rights based on seniority

of supplies. Hence, they can encourage new investment in activities requiring large water quantities (Thobani, 1998). For instance, an investor willing to start a water bottling plant using deep tube wells by buying water rights in the same aquifer from a farmer can generate revenue for the farmers with surplus water and generate employment for plant workers (Thobani, 1998). On a similar note, many small farmers in Durango/Coahila of Mexico are known to take advantage of their ability to sell their water rights to generate alternate revenue streams (Thobani, 1998).

The process of Water Market

Applying water markets in the local contexts would require proper acquaintance with the idea and process of water markets in general. Thobani (1998) identifies the process of water markets characterized by either price fixation, formal, or informal market approaches.

- **Pricing (price fixation) approach**

  This approach recommends that public authorities unilaterally fix the price of water rights to reflect its actual scarcity or opportunity cost, thereby inducing water conservation and making more water available for higher-value uses (World Bank, 1993). For instance, this approach of water markets insists on the argument that if the price of water rights held by a farmer near a city could be fixed at what a drinking water corporation would be willing to pay for the crude water, some farmers would give up farming or choose more efficient irrigation technique so that the surplus amount of water can be sold for higher prices (Thobani, 1998).

  However, this approach to water markets holds crucial limitations as accurate measurement of the opportunity cost of water use is laden with tremendous difficulties since it varies according to location, water quality, season, year, reliability, and use (Thobani, 1998). For instance, the opportunity cost of water use across the diverse sectors is far lower during normal years than during drought years.

- **Formal market approach**

  The formal market approach facilitates legal enforcement of water trading by ensuring that the tradable water rights registered in the public registries are traded at the capacity of contract enforcement. Hence, it is important to note that the facility of legal contract enforcement for the sale, purchase, or lease of water rights observed in the formal market approach is only made possible through the official adjudication of water rights. Such adjudication is made individually or collectively among Water User Associations (WUAs)[5] followed by registration of adjudicated water rights in an official public record (i.e., a prerequisite for water markets) (Easter, Dinar, & Rosegrant, 1998). In simple words, it is essential to officially establish and allocate all water rights of a water body before formal water markets for trading the rights to the use of the water body can function. (Thobani, 1998).

  For instance, adjudication of water rights in Chile requires the rights to be officially recorded in a public registry as either consumptive or non-consumptive, permanent or temporary (contingent) (Thobani, 1998). As such, the registered rights can be either leased, sold, or even used as collateral (Thobani, 1998).

5 See Hearne (1998) to learn about functions and role of WUAs

Technically, the adjudication of rights that can be facilitated for exchange via formal water markets approach in Chile begins either by petition for obtaining water rights on the grounds of prior appropriation or through auction when multiple petitions are solicited for the same rights (Thobani, 1998).

Additionally, to fulfill the formal trade of officially registered water rights in the form of sale or lease, the process can also require the trade to be facilitated by a legitimate public institution. For instance, in the State of Utah and New Mexico of the USA, applications for new appropriations or permanent transfer of water rights require approval from the Office of the State Engineer (Howe, 1998). In contrast, the State of Colorado requires proposed transfer to be advertised, challenged by parties that perceive themselves to be injured by the transfer if applicable before the water court system approves the trade (Howe, 1998).

- **Informal market approach**

In contrast to the formal market approach, the informal market approach features contract enforcement regarding the trade of water rights not by the legal system but based on reputation, general morality, and personal trust within social networks (Easter, Dinar, & Rosegrant, 1998). This creates limitations in the scope of water trading as exchanges between members of different communities cannot occur as social ties and personal trust is only found within a small community. Also, informal market approaches are featured during the trade of implied water rights that have not been well-defined or recorded (Easter, Dinar, & Rosegrant, 1998). Easter, Dinar, & Rosegrant (1998) identify informal water markets as a good option if third-party challenges are common and result in high transaction costs for formal water markets. In countries with numerous small-scale water users, it may be better to encourage the procreation of informal markets as many of the costs of establishing and enforcing water rights can be avoided (Easter, Dinar, & Rosegrant, 1998). However, the informal market approach of water trading is known to have contributed to the depletion of aquifers in parts of South Asia and Mexico as the market approach does not feature "absence of damage doctrine" whereby the sale of water cannot disturb instream uses of water or sustainable use of water.

Application of the resolution for grievance concerning Melamchi Drinking Water Project

The entire claim on the Melamchi river flowing downstream from Riverma (Ambathan) by the local community users of Helambu as implied by the Mayor of Helambu RM cannot be granted based on either of the doctrines discussed to adjudicate water rights. Given the fact that the prior local users of the river water mostly adjacent to the river banks are/were not utilizing the water resources of Melamchi river at its full capacity, rights representing the entire waters flowing downstream prior to tunnel diversion cannot be adjudicated as each share of water rights needs to be justified with the clause of beneficial prior use as directed by the modern interpretation of doctrines of water rights. And, amid only a minor proportion of the flowing river stream estimated to have been used for irrigation purposes, fish farming, and other beneficial consumptive and non-consumptive purposes, water rights for the entire water being diverted from the Melamchi tunnel cannot be established for prior local users of Helambu RM. In fact, rights upon the amount of water in the Melamchi river other than that can be reasonably adjudicated to the local prior water users of Helambu RM can be justifiably adjudicated to federal project implementors of the Melamchi Drinking Water Project. Using or diverting a water body for drinking water purposes is also prioritized over using water for irrigation or fishery by the current Water Resource Act, 1992 of Nepal. In fact, water resources for drinking purposes are prioritized over the use of water resources for any other purpose listed in section – 7 of the Water Resource Act, 1992. Hence, it establishes sufficient premises to deny stipulated payment for each liter of water diverted from the Melamchi Tunnel to the local government of Helambu RM as publicly demanded (Sherpa, 2021).

However, a justifiable amount of water rights to the prior local users of the Melamchi river flowing downstream from Ambathan adit must be adjudicated volumetrically or proportionally to ensure that the Melamchi diversion has not infringed their water rights. As such, the rights ought to be adjudicated not only based on current beneficial use of water but also based on maximum potential beneficial use of water by the local community living adjacent, or far from the river in terms of irrigation, trout fish farming, industrial, and other consumptive and non-consumptive household uses in future. The standard of PIA may be referred to determine the maximum potential use of water to furnish specific purposes that need to be adjudicated with communal or private water rights. Also, additional water rights to sufficiently fulfill instream water services, recreational services, and preserve the local ecosystem need to be adjudicated and handed over to the local government of Helambu RM. Of course, the entire process of right adjudication of the Melamchi river shall require the participation of diverse stakeholders from the local government representing the local community, officials from MWSDB, agencies representing the Federal Ministry of Water Supply (MWS), and agencies representing the provincial government and private experts. Meanwhile, the local government of Helambu RM or a WUA representing prior local users of the Melamchi river of Helambu RM can be established to hold custody of any rights adjudicated to local water users.

Following the adjudication of sufficient water rights of Melamchi river to the local water users of Helambu RM, any payment to the local government of Helambu RM should only occur for the volumetric or proportional quantity of water that the local water users are obliged to give up (in the present or future) to satisfy the stipulated amount of water to be diverted from the Melamchi tunnel. For instance, if Melamchi river is measured to flow 20 ml/d of water uninterrupted whereby local prior beneficiaries of Melamchi river is collectively adjudicated with water rights measuring five ml/d of water for consumptive and non-consumptive uses, diversion of 17 ml/d of water through the Melamchi tunnel will require MWSDB to purchase water rights measuring two ml/d of water or lease the specified quantity of water from the local water users to satisfy its daily water requirement[6]. However, no such payment shall be required if it would not be necessary to divert the proportion of water adjudicated to the local water users of Melamchi river in Helambu RM. After all, the amount of water diverted by the Melamchi tunnel would be within the volumetric quantity of water apportioned based on the water rights adjudicated to the implementor of the federal drinking water project.

6 The following assumption omits the adjudication of non-tradable water rights required to fulfill instream water uses, preserve local ecosystem, and sustain recreational purposes

The trade of water between the monopsonistic purchaser (i.e., MWSDB) of additional Melamchi water rights and the monopoly seller (i.e., local water users of Melamchi river downstream of Ambathan Adit) of the very water rights requires the process of water markets. Given the involvement of a legitimate federal agency and the local government in the trading process, the trade approach must be formally followed by official adjudication of rights, as discussed earlier. Hence, proper infrastructure to legitimatize the trade of water rights in terms of sale or lease at the capacity of contract enforcement needs to be established.

Likewise, the pricing of water rights traded can be negotiated between the parties involved during the adjudication of the water rights of the Melamchi river, although the price fixation approach of water markets is known to hold certain limitations[7]. However, sufficient consideration for (if not limited to) end-user sales price per unit of water, operation and capital cost relating to the project, and the marginal value of additionally purchased/sold water for the local water users of Helambu RM and denizens of Kathmandu city needs to be made while making the pricing decisions. Most importantly, the success of the pricing decision of Melamchi water rights shall be measured by its ability to voluntarily incentivize the trade for both parties as a competitive market-based pricing mechanism would.

Conclusion

Apart from Melamchi Drinking Water Project, resolution of the water market can be established for the benefit of all stakeholders involved and affected by government pledged marine/water diversion projects for irrigation and drinking water purposes across the country. As such, water markets can be established to compensate localities and local water users likely to be affected by grand irrigation and water-related multipurpose projects as Sikta Irrigation Project, Bheri-Babai Diversion Multipurpose Project, Rani Jamariya-Kuleria Irrigation Project, Sunkoshi Marine, and Kaligandaki Tinau Irrigation Project projected to irrigate about 42000-51000 hectares of irrigable lands through approaches featuring inter-basin water transfers (Risal, 2021).

References

Archibald, S. O., & Renwick, M. E. (1998). Expected Transaction Costs and Incentives for Water Market Development. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 95-118). Boston: Kluwer Academic Publishers.

Characklis, G. W., Griffin, R. C., & Bedient, P. B. (1997). Improving the Ability of a Water Market to more Efficiently Manage Drought in lower Rio Grande. In Sustainable Development: Managing the Transition, De Lange Woodlands Conference (pp. 317-336). Houston: Energy and Environmental Systems Institute, Rice University.

Colby, B. G. (1998). Negotiated Transactions as Conflict Resolution Mechanisms: Water. In A. Dinar, M. W. Rosegrant, & K. W. Easter, Markets for Water: Potential and Performance (pp. 77-94). Boston: Kluwer Academic Publishers.

Easter, K. W., Dinar, A., & Rosegrant, M. W. (1998). Warket Markets: Transactional Costs and Institutional options. In K. W. Easter, A. Dinar, & M. W. Rosegrant, Markets for Water: Potential and Performance (pp. 1-19). Boston: Kluwer Academic Publishers.

7 See Saleth (1998) to learn about the limitation of price-fixation approach in water trading

Griffin, R. C. (1998). The Application of Water Market Doctrines in Texas. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 51-65). Boston: Kluwer Academic Publishers.

Hearne, R. R. (1998). Institutional and Organizational Arrangements for Water Markets in Chile. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 141-158). Boston: Kluwer Academic Publishers.

Howe, C. W. (1998). Water Markets in Colorado: Past Performance and Needed Changes. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 65-76). Boston : Kluwer Academic Publishers.

Livingston, M. L. (1998). Institutional Requisites for Efficient Water Markets. In K. W. Easter, A. Dinar, & M. W. Rosegrant, Markets for Water: Potential and Performance (pp. 19-34). Boston: Kluwer Academic Publishers.

Meinzen-Dick, R. (1996). Groundwater Markets in Pakistan: Participation and Productivity. Washington DC: International Food Policy Research Institute.

MWSDB. (2021). Melamchi WSP - An Introduction. Kathmandu: Melamchi Water Supply Development Board. Retrieved from MelamchI Water Supply Development Board.

National Planning Commission. (2021, May 18). National Pride Projects. Retrieved from National Planning Commission: https://www.npc.gov.np/en/page/74/visualing_development/data/national_pride_projects

NNRFC. (2020). NNRFC Information Book. Kathmandu: National Natural Resource Fiscal Commission.

Risal, B. (2021, May 16). नेपालको पानीमा भारतको आँखा. Himal Khabar. Retrieved from https://www.himalkhabar.com/ news/123512 ?fbclid=IwAR1MuRJ4rvhNN pPBWfLBtXQvMH17hO_75JFt4Mw FytW91qrFHd6oST5MuI0

Rosegrant, M. W., & Binswanger, H. P. (1994). Markets in Tradable Water Rights: Potential for Efficiency Gains in Developing Country Water Resource Allocation. World Development, 1613-1625.

Saleth, R. M. (1998). Water Markets in India: Economic and Institutional Aspects. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 187-206). Boston: Kluwer Academic Publishers.

Sherpa, N. G. (2021, April 4). Melamchi Dispute. (M. Joshi, Interviewer)

Skillern, F. F. (1988). Texas Water Law (Vol. I). San Antonio, Texas, United States of America: Sterling Press.

Thobani, M. (1998). Meeting Water Needs in Developing Countries: Resolving Issues in Establishing Tradable Water Rights. In K. W. Easter, M. W. Rosegrant, & A. Dinar, Markets for Water: Potential and Performance (pp. 35-50). Boston: Kluwer Academic Publishers.

Weldon, E. (2000, October). Practically Irrigable Acreage Standard: A Poor partner for the West's water future. Water Rights and Watershed Management: Planning for the future, 25 (2000-2001)(1), pp. 203-231. Retrieved from https://scholarship.law.wm.edu/wmelpr/vol25/iss1/7

World Bank. (1993). Water Resource Management, A World Bank policy paper. Washington DC: World Bank.

Economic Freedom:

Nepal's Guide to prosperity after LDC graduation

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Introduction

Least Developed Countries (LDCs) are often trapped in vicious circles (United Nations Conference on Trade and Development, 2017). Many LDCs suffer from a poverty trap, with low income and limited economic growth giving rise to high levels of poverty, which in turn put a brake on economic growth. Two thirds of the labor force of LDCs work in mostly smallholder agriculture, a sector suffering from chronically low labor productivity. Other contributing factors are weak productive bases and limited export diversification which give rise to a very high import content in production and consumption, and chronic current account deficits.

In principle, graduation implies having risen sufficiently above these vicious circles and marks a move from economic dependence to a state of greater self-reliance. Any LDC becomes eligible to graduate if they meet two of the three criteria set by the United Nations (United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, n.d.). Nepal met the graduation criteria in 2015 and fulfills two of the required three graduation criteria, namely Human Assets Index (HAI) and Economic Vulnerability Index (EVI) (United Nations Department of Economic and Social Affairs Economic Analysis, n.d.). As of 2021, the Gross National Income (GNI) Per Capita Income of Nepal, however, is only $1090 according to the United Nations and the minimum threshold for graduation needs to be at least $1222.

Nepal requested to delay its graduation citing the setbacks on Nepalese economy due to the earthquake in 2015 and other natural calamities over the years. Currently, Nepal faces a similar situation when the economy is severely impacted by the Covid-19 pandemic and it can be expected that income growth will be equal to zero or none. Sapkota (2018) quotes the then Finance Minister Yubraj Khatiwada saying that, "we'll first boost our Per Capita Income (PCI) to the required level by the 2021 review. Then we'll be ready to graduate to a developing country but it's too early now." Nepal is yet to reach the required PCI threshold in 2021. Prasain (2020) in his article quotes Bishwanbher Pyakuryal, "despite the successful and rapid reduction in poverty, due to the low-growth trap even before the Covid-19 pandemic, Nepal was not in a position to become a lower-middle-income country before 2030. With growth stalling for a few years due to the pandemic, graduating to a lower-middle-income country before 2030 has now become a distant dream". However, the Committee for Development policy (CDP) recommends Nepal to graduate in 2026 in its triennial review of 2021. Though a preparatory period of 5 years is provided, the debate still remains for Nepal to choose graduation or not.

What is at Risk?

Apart from a sluggish growth rate over the past three decades, Nepal lags behind in merchandise export performance, partly because it is a landlocked country. In 2017, its exports of goods stood at $741 million – down from its highest-ever receipts of $900 million in 2011. India, the United States of America, and a handful of European countries comprise Nepal's major export destinations.

Razzaque (2020) uses a gravity model to draw significant observations in terms of Nepal's export product space and suggests that the realized export of Nepal, $741 million in 2017, is less than one-third of the potential of $2.31 billion. The largest difference between actual and predicted exports is with India, that is, Nepal can potentially earn an additional $ 1 billion from India. Similarly, Nepal's export to China is almost half a billion dollars less than what is predicted. Amongst others, Nepal is under-exporting by about $50 million to Bangladesh, $24 million to Pakistan, and $18 million to Japan. In countries such as Australia, Canada, Germany, Italy, Turkey, the United Kingdom, and the United States, Nepal's export volumes are higher than what can be predicted from the global countries' experience. These are the countries where Nepal also gets preferential market access as an LDC.

The European Union is the second-largest destination of Nepal's exports after India accounting for 13.5 percent of its total export. Woven garments and knitwears are major items exported to the EU countries from Nepal. Currently, Nepal enjoys a preference under the Everything But Arms category in exporting to EU countries. Under the preference, all sensitive as well as non-sensitive goods are exempt from duty charges. A change in this preference policy after Nepal's graduation will mean that exports will be subjected to the terms of Nepal's new category-either a standard Generalised Scheme of Preferences (GSP) or GSP+. A country in these two categories has a Duty reduction of only 66% of all EU tariff lines compared to the previous full-waiver for non-sensitive goods. In the case of sensitive goods, Nepal may enjoy either a full waiver on the tariff line or will be subjected to a duty reduction that entails 30% of the specific duty and upto 3.5 percentage point on ad-volume duty.

In either case, there could be up to a 60% increase on the threshold of minimum local value-added for Nepal to qualify for export to EU countries. Apparel stands out as the most important export item and under the revised circumstances, Nepal may see a duty reduction of up to 30%.

Various international treaties and agreements make supportive provisions for the least developed countries such as agreements on agriculture, on Trade Related Investment Measures, on Subsidies and Countervailing Measures, on Trade Related Aspects of Intellectual Property Rights (TRIPS), Trade Facilitation Agreements, etc. Hence, the promotion of Nepal from a Least Developed Country would harm us in exports. The country will be losing its preferential access to major markets (Razzaque, 2020) as mentioned below:

Preferential Market Access for Goods-Tariffs

Market	Description	Duty free tariff line coverage and major exclusions
Australia	Duty-free, quota-free entry (DFQF) for LDCs Entry into force: 1 July 2003	100 percent
Canada	Generalized System of Preference (GSP) Least Developed country Tariff Programme(LDCT) Entry into force: 1 January 2000 Extended until 31 December 2024	98.6 percent (Exclusion: dairy and other animal products, meat, meat preparation, cereal products)
Chile	DFQF scheme for the LDCs Entry into force: 28 Feb 2014	99.5 percent (Exclusion: cereals, sugar, milling products)
China	Duty free treatment for LDCs Entry into force: 1 July 2010	96.6 percent (Exclusion: chemicals, transport vehicles, machinery and mechanical appliances, electrical machinery, paper)
European Union	GSP-Everything But Arms (EBA Initiative Entry into force: 5 March 2001	99.8 percent (Exclusion: arms and ammunition)
Iceland	GSP-Tariff preference for world's poorest countries Entry into force: 29 January 2002	91.8 percent (Exclusion: meat, food preparation, vegetables, dairy and other animal products, plants and trees)
India	Duty Free Tariff Scheme (DFTP) Entry into force: 13 Aug 2008	94.1 percent (Exclusion: plastics, coffee and tea, alcoholic beverages, tobacco, food residues)
Japan	GSP-Enhanced duty and quota free market access Entry into force: 1 April 2007 Extended until 31 March 2012	97.9 percent (Exclusion: fish and crustaceans, footwear, milling products, cereal products, sugar)
Korea, Republic of	Presidential Decree on Preferential Tariff for LDCs Entry into force: 1 January 2000	89.9 percent (Exclusion: fish and crustaceans, mineral fuels, oil seeds and oleaginous fruits, wood products, vegetables)
Zealand	GSP-Tariff Treatment for LDCs Entry into force: 1 July 2001	100 percent

Norway	GSP-DFQF market access Entry into force: 1 July 2002	100 percent
Russian Federation	GSP scheme in the context of the Customs Union between Belarus, Kazakhstan and the Russian Federation Entry into force: 13 Aug 2008	37.1 percent (Exclusion: machinery and mechanical appliances, chemicals, electrical machinery, iron and steel products, transport vehicles)
Switzerland	GSP-Revised Preferential Tariff Ordinance Entry into force: 1 April 2007	100 percent
Chinese Taipei	Duty-free treatment for LDCs LDCs Entry into force: 17 December 2003	30.8 percent (Exclusion: machinery and mechanical appliances, chemicals, electrical machinery, fish and crustaceans, plastics)
Thailand	Duty free treatment for LDC since 2015	70.4 percent

Source: Nepal Human Development Report, 2020

Preferential Market Access for Goods-Rules of Origin

Country	Origin criteria	Requirements	Percentage level
Australia	Last manufacturing process performed in LDC; product specific rules	Minimum amount of allowable factory cost	Allowable factory cost should be at least 50% of the total factory cost; For LDC 75% with cumulation
Canada	One single rule across the board, for all products except textile and apparel articles where product specific rules apply	Maximum amount of non-originating inputs	Maximum non-originating materials 60%; for LDC, 80% with cumulation
European Union	Product specific rules for all products	Change of HS heading with or without exemptions, specific working or processing requirements and/or maximum percentage of imported inputs or combinations of requirements	Maximum amount of no-originating material does not exceed 70%. Exception under chapter 63: 25%, 40%, 50% where used in the single list
India	One single rule for all products	Change in tariff sub-heading (CTSH) and maximum percentage of non-originating materials	Maximum amount of non-originating materials 70%

Japan	CTH as a general rule and Single List of product specific rules	Change of HS heading with or without exemptions, specific working or processing requirements and/or maximum percentage of imported inputs or combinations of requirements	Maximum amount of non-originating materials 40%
Norway	CTH, product specific rules	Maximum local content requirement	At least 50%
Switzerland	Product specific rules	Maximum value of non-originating materials	Maximum 70%
Thailand	Last manufacturing process performed in LDC	maximum amount of non-originating inputs	Maximum amount of non-originating materials 50%
USA	One single percentage (35%) rule across the board for all products	Minimum local content requirement	Minimum 35%, exact percentage must be written in certificate of origin

Source: Nepal Human Development Report, 2020

But a point to be noted is that in spite of the preferential market access given to Nepal, the country has not been able to use the facilities provided for the least developed countries. Paudel (2021) citing a WTO study, mentions that only 10-20 percent of our exports have used the facilities provided to Least Developed Countries and the World Bank's Gravity Model reveals that Nepal needs to export products worth $2.31 billion, but has not been able to do even half of that. As per Nepal Trade Information Portal, in 2020, 73 percent of our exports went to India, 10 percent to the United States and 3 percent to the U.K. Graduating from the least developed countries is expected to reduce Nepal's exports by 2.5 percent but Nepal Human Development Report 2020 reveals that no larger impact is foreseen.

Apart from exports, there is a fear that graduating will cut off all facilities immediately which will not be the case. For example, the assistance of the United Nations Technology Bank will be available for five years after the upgrade. The United Nations or the World Trade Organization (WTO) has said that the membership fees of such countries will not increase, so that countries do not fear graduating and don't graduate due to greed for convenience or fear of increasing liabilities and responsibilities. Also, there is a question of increase in the cost of domestic production. For example, there is a concern that the pharmaceutical industry may be negatively affected as it is one of the fastest growing industries in Nepal and has used some of the facilities under the TRIPS. It is to be noted that the TRIPS facility will not be affected till 2033 even after graduation. Similarly, the TRIPS agreement - which sets local content limits - is not implemented immediately even after it has been graduated from a least developed country. The WTO Special and Differential (S&D) provisions remain in force even after graduating.

As for financial grants, the World Bank does not use LDC's preference in grants and soft loans. Under the International Development Association (IDA), we get low-interest loans (for example, NPR 1.4 billion for the current three years) until per capita income is $1,175.

It supports middle-income countries through IBRD. The Asian Development Bank (ADB) also does not base its decision on LDCs in countries; it bases its decision on the basis of lower incomes than the minimum threshold.

Apart from these two important institutions, economic grants from countries like India and China have little to do with whether we are an LDC or not. Countries still support their strategic partners. Developed countries now spend only 0.10 percent of their GDP on foreign aid. In such a situation, the bilateral assistance and grants received by the very poor countries like Nepal are less. On top of that, the grants coming through multilateral organizations are also less. Therefore, with the increase in our capacity to mobilize internal revenue and increase the volume of remittances, we will not require much financial assistance from the UN, which is said to be lost when it comes to graduating from the least developed countries.

Implementing Changes

To not only graduate but sustain, countries should prioritize a structural transformation of economy and development of productive capacities, including shifting production and exports to higher-value-added products and sectors, upgrading technology, diversifying the economy and raising productivity. The Nepal Human Development Report (2020) recommends Nepal to prepare a transition strategy to avoid adverse impacts from the country's graduation from an LDC. The best way to avoid any adverse impact to the country is to increase freedom in terms of economic activities. A wide range of empirical studies has shown a positive relationship between economic growth and economic freedom, a premise Nepal must adhere to with high regard if it is to make a meaningful stride after it graduates from the LDC category. Carlson & Lundstrom (2002) used a random effect model to decompose time series data between 1975 and 2000 for 74 countries to examine the significance of economic freedom to grow. The model used components of the freedom indices - personal choice, protection of property, and freedom of exchange - from Economic Freedom of the World: 2000 Annual Report and further categorized them into three broader indices with different weightings using a principal component analysis. The findings suggested that four of the significant economic freedom variables are positively related to growth; however, two are, at all or some index values, negatively related to increased freedom. In terms of lower government consumption and transfers decreases the growth rate (see the findings from the research in the table below). Among the robust categories, size of Government, Legal Structure, and Freedom to Trade with Foreigners have the largest effect on the growth rate, and the estimates were robust overall.

The findings from Carlson & Lundstrom are also consistent with a swath of other empirical studies. Sala-i-Martin (1997 a,b) suggests that several economic freedom measures have a significant and sizable effect on the growth of GDP.

The economic freedom indicators are necessary for assessing the government's efficacy. Nepal can gain from pouring its resources to build an infrastructure that supports free-market operations. In addition, a meticulous rethinking exercise on how to bolster domestic capacity for export can benefit from rethinking contract enforcement practices within the country, and with a focus on stable monetary policy. Evident in the wake of Bangladesh's graduation from the LDC category, Nepal can expect a remarkable erosion of preference that it currently enjoys in international trade.

Utilizing export potential to the fullest

Nepal, currently, is underutilizing its export potential, and with an export market penetration rate of just 2.4 percent, the lowest amongst other Asian LDCs of Afghanistan, Bangladesh, Maldives, and Myanmar, is yet to attempt to tap the vast potential that lies ahead. The World Bank (2021) estimates that Nepal could create an additional 38 jobs in agriculture and 13 additional jobs in manufacturing for every $1 million worth of new exports and also mentions that the country's untapped potential is equivalent to 12 times its actual annual merchandise exports. Additionally, the report also mentions that the growing imports in the countries geographically close to Nepal corresponds to Nepal's export potential.

Nepal must tap into these opportunities available especially when the country is in a transition for graduating to a middle-income country. The country must focus on addressing policy barriers, missing infrastructure linkages, and administrative hurdles to facilitate ease of trading across borders. The absence of proper trade related and other infrastructures has been the biggest constraint for growth of Nepalese trade (Ghimire, 2016). Lack of access to seas add around 15 p.c. transit related costs in export (ibid.) and in addition to the absence of proper road networks and storage facilities Nepalese exports face difficulties in being competitive.

Nepal mainly uses two Indian ports as a transit point: the Kolkata port and the Vishakhapatnam port because of its ease compared to the ports accessible via China. The distance to the nearest Chinese port in Tianjin is 3276 km from the Nepal border (Giri, 2019) and besides the distance Nepalese traders have to face other technical barriers while conducting via China. Treaty of Transit between Nepal and India guarantees the freedom of transit across their respective territories through mutually agreed upon routes. Despite all procedures neatly laid down, the processing time at the port of Kolkata normally is 3 to 5 days for transit goods even with all of the required transit documents and the one time lock system of containers (Rajkarnikar, 2006). Nepalese traders also face issues such as double submission of physical copies of documents to both Indian and Nepalese custom authorities. The absence of proper implementation of the Electronic Data Interchange System (EDIS) has compelled the traders to face inefficiency and delay (New Business Age, 2020). Traders complain of the compliance process increasing the custom clearance days after the implementation of EDIS (ibid.).

Inland Clearance Depots (ICDs) have been established in Birgunj, Biratnagar and Bhairahawa. The Birgunj ICD which handles cargo movement carried out through railway service via Indian seaports in Kolkata, Haldiya and Visakhapatnam is inefficiently managed and recently has been facing a problem with excess cargo traffic. Limited infrastructure and failure of traders to clear the containers on time are among the major underlying problems at the dry port (TKP). Despite the importance of dry ports and ongoing construction of other additional dry ports, Nepal has still not ratified "Intergovernmental Agreement on Dry Ports'. Also, the facility of dry port is not yet available at Kathmandu, which is the major traffic-generating center in Nepal, to facilitate intermodal container movement (Rajkarnikar, 2006).

Despite the challenges, in absence of access to the Indian ports, Nepalese trade will be highly impacted. In the recent times of crisis in the South Asian regions, ship liners are hesitant to use Indian ports citing risks which has added to Nepal's inefficiency in conducting trade with foreign countries (Ale, 2021). It may take time to solve issues like one mentioned above as an external catalyst is the reason for inefficiency in Nepalese trade but the majority of the problems have also aroused internally. It is necessary to look inwards to solve the trade related problems as such can be solved promptly.

Internally, Nepal must look at the problems that have hampered the trade competitiveness of industries exporting in foreign lands. World Bank (2021) mentions that Nepalese border crossings are congested due to inadequate infrastructure and lack of streamlined procedures and processes and have increased product losses as well as logistics costs. One such policy is the duty drawback policy. Though the motive behind such policy is plausible, its implementation has been dismal. Many exporters claim that the process of duty drawback is cumbersome and takes a long time to get the refund approved (Ghimire, 2016). Likewise, the lack of technology implementation in custom clearances has been a major hassle for the traders. Nepal can start by implementing technologies in the implementation of protocols and processing related to customs to increase efficiency and transparency as well as reduce redundancy. For instance, Nepal can implement scanners at custom points to scan the containers rather than make a manual inspection (Himalayan News Service, 2019) and invest in digitization of trade to provide more opportunities for traders to link with the global value chains. There is also a need to invest in infrastructure to test the product standards to make exports competitive. Ghimire (2016) mentions the need of quarantine labs adhering to the guidelines of Codex Alimentarius Commission that formulates international food standards, guidelines and codes of practice. Similarly, World Bank (2021) suggests adopting a risk based Sanitary and Phytosanitary system and shifting attention from routine controls to prevention and targeted controls.

Creating a conducive environment for businesses

Similarly, the macro-economic indicators from within the country's economy depict a stagnation in economic activities i.e. the gross value added of the manufacturing sector to the GDP for FY 2019/20 was 5.09% and is projected to decline by 2.29 percent due to the Covid-19 pandemic. The growth of industrial output has a significant effect on the growth rate of the product of the economy as a whole. The Kaldor-Verdoorn law establishes a deterministic relation between the growth of manufacturing productivity and output growth in the manufacturing sector (Kaldor, 1966[1966]).

With Nepal's graduation slated for 2026, its past performances on economic indicators need to be reflected. The index published in Economic Freedom of the World by the Fraser Institute measures the degree to which the policies and institutions of countries are supportive of economic freedom using 42 data points across five broader areas for 163 countries. The areas covered are the size of the government, legal system & property rights, sound money, freedom to trade internationally, and regulations.

Nepal's rank for the year 2020 was 109th with an overall score of 6.48 on a (1-10) ascending scale; 1 being the lowest and 10 being the highest. Nepal's freedom to trade internationally was ranked 111th and had a score of 4.6 for non-tariff barriers. These rankings are indicative of a state of affairs that needs fixing.

The World Bank ranks Nepal at 94 out of 190 economies in the Doing Business Report 2020. Nepal improved in the overall index when compared to previous years but its performance in the individual indicator does not look satisfactory. Removing barriers for private sector led development is a prerequisite for Nepal which will ultimately help in realizing the goal of increased per capita income as in the case of Bangladesh. As per Basu (2018), Bangladesh achieved this feat by providing manufacturing firms a better environment to achieve economies of scale and create a large number of jobs. Nepal also needs to initiate changes to the policies that regulate the business environment in the country and facilitate their growth.

World Bank Ease of Doing Business Ranking of Nepal

Indicators	Rank (Out of 190 countries)
Starting a Business	135
Paying Taxes	175
Dealing with Construction Permits	107
Getting Electricity	135
Registering Property	97
Getting Credit	37
Protecting Minority Investors	79
Trading Across Borders	60
Enforcing Contracts	151
Resolving Insolvency	87

Source: World Bank, 2020

For starters, Nepal needs to effectively decentralize the company registration procedure which is currently centralized in the capital of the city. The functions of the Office of the company registrar needs to be devolved so that new business owners do not need to face additional burden of traveling to the capital to register their businesses and also to extend the boundaries of the company registration among those businesses currently operating in the shadow economy. Additionally, the government needs to integrate Information and Communication Technologies (ICTs) to bring changes to the company registration process. The current practices of multiple submissions of documents to different government institutions and to present both soft and hard copies of the documents has only added to the layer of compliances that needs to be followed by businesses.

Likewise, the government should also ease up the procedures for companies to make an exit. Companies that are planning and have to exit the market require to expend a huge amount of time to officially shut their businesses down. Say, if a company files for insolvency, the court appoints an investigating officer and on his/her recommendation, either a liquidator or a restructuring manager is hired to close the process. The need for an investigation officer seems to add little to the procedure of company exit and the time taken to investigate the matter will only extend the bankruptcy proceedings.

Government should also make policy changes to ensure smooth operation of businesses so that the operating costs of businesses go down. For instance, the government needs to ease up procedures while filing taxes, while enforcing a contract during a dispute, etc. As per the data of Doing Business (2020), in Nepal it takes an average of 910 days or approximately 2.5 years to enforce a contract totaling costs equal to 27.3% of the claim. Likewise, removal of anti-competitive practices and amendment to the legislation as the need of the market is another step the government can take to facilitate business operations. The absence of a regulation to facilitate the growing trend of private vehicles serving as a means of transportation has hampered the businesses of various new companies. The constant dispute between the taxi riders and the private vehicles owners attached with the unsupportive decisions of the government has put the future of the startups and other innovative business ideas into question.

The presence of syndicates and cartels in the Nepalese market has prevented the market from expanding. The presence of lobbyists demanding to put restrictions on import of goods is another hindrance to Nepalese market. As a result, the goods that enter Nepal are much more expensive than its actual prices. So, it is important for Nepal to necessitate the annulment of regulations that promote anti-competitive practices.

Foreign Investments is another factor that should be equally considered when focusing on developing conducive business environments. While the Nepalese government focuses on economic diplomacy (Ministry of Foreign Affairs, 2020), the policies in the country are not favorable to foreign investment. As per Nepal Rastra Bank (2021), there is a huge gap between the FDI commitments and the actual FDI. While the commitments stood at Rs. 38 billion, the actual investment was situated at Rs. 19.48 billion. Likewise, in order to invest in Nepal, an investor needs to obtain clearance from a multitude of government agencies along with bureaucratic hurdles and various red tape barriers. For example, the delay of approval from the Ministry of Industries to Arghakhanchi Cement for issuing bonus shares with the purpose of reinvestment led the company to distribute cash dividends. In the similar manner, Nigeria's Dangote Cement, which had received approval for the highest Foreign Direct Investment of $550 million failed to get limestone mines for six years because of lack of facilitation from the government (Shrestha, 2019).

Similarly, when it comes to granting a business visa to foreign investors, the Foreign Investment and Technological Transfer Act, 2019 holds a provision of providing a business visa to only two people once they express a commitment of investing 100 million or more and invest 25 percent of the commitment. The provision of putting a cap on the investment limit to provide business visas to foreign investors may deter foreign investment in the country. The Foreign Investment and Technological Transfer Act, 2019 also includes an appendix that discloses sectors where foreign investments are not allowed. The reason behind a negative list is to protect the domestic industries in the country; however, sectors such as tourism, trekking, mountaineering, etc. hold enormous potential and will benefit highly from foreign investments. The government must remove such high potential sectors from the negative list so that the sector can be competitive and ultimately contribute to economic development.

Conclusion

After delaying its graduation since 2015, Nepal is planning to take the plunge in 2026. Despite being given ample preferential access to major markets, Nepal has not been able to realize even half of its export potential. Compared to this, the drop in exports due to graduation is insignificant. Furthermore, loans and economic grants acquired from organizations like the World Bank, ADB, or even countries like India and China have little to do with Nepal's LDC status. Nepal's graduation from the least developed country list will be a significant achievement. Especially while facing challenges brought forth by the COVID-19 pandemic, graduating will signify the country's ability to maintain consistency in its economic growth. Of course, there is still more economic stability that is needed before the country can significantly reduce its economic vulnerability but graduating from LDC will give Nepal that much required confidence boost.

A transition strategy is imperative for a structural transformation of the economy in light of graduation. For this, ensuring economic freedom is necessary more than ever before. Significant studies have found a positive correlation between economic freedom and GDP. In the meantime, domestic capacities have to be upgraded with major revision in policies to facilitate trade and tap in the existing export possibilities.

To reap the fruits of labour, to gain affirmative validation, to see Nepal achieve such an important development milestone is essential as this boosts national sentiments. As this graduation is taken as a sign of progress it will amend Nepal's reputation in the international community. By using smooth transition plans and policies, careful management of the graduation process with the help of consultative mechanisms, Nepal can successfully transition to a lower middle-income country.

References:

Ale, P. (2021, May 20). Condition of Nepalese Trade. (P. Maharjan, Interviewer)

Basu, K. (2018, April 23). Why is Bangladesh Booming? Retrieved from Project Syndicate: https://www.project-syndicate.org/commentary/bangladesh-sources-of-economic-growth-by-kaushik-basu-2018-04?barrier=accesspaylog

Carlsson, F., & Lundström, S. (2002). Economic Freedom and Growth: Decomposing the Effects. Public Choice, 112(3/4), 335-344. Retrieved May 26, 2021, from http://www.jstor.org/stable/30026309

Ghimire, L. S. (2016). Nepal's Widening Trade Deficit (Some Issues, Challenges and Recommendation).

Giri, A. (2019, May 07). Nepal needs much work before using Chinese sea and land ports. Retrieved from The Kathmandu Post: https://kathmandupost.com/national/2019/05/07/nepal-needs-much-work-before-using-chinese-sea-and-land-ports

Himalayan News Service. (2019, January 26). DoC plans to instal advanced scanners. Retrieved from The Himalayan Times: https://thehimalayantimes.com/business/doc-plans-to-instal-advanced-scanners

KALDOR, N. (1978[1966]). "Causes of the Slow Rate of Economic Growth in the United Kingdom", in KALDOR, N., Further Essays on Economic Theory, N. York: Holmes & Meier

Ministry of Foreign Affairs. (2020). Foreign Policy. Kathmandu.

Ministry of Industry, Commerce and Supplies. (n.d.). Nepal Trade Policy Review: 2018. Government of Nepal.

Ministry of Finance of Bangladesh. (2018). Bangladesh Economic Review 2017. Dhaka: Bangladesh Government Press.

Nepal Rastra Bank. (2019). A Survey Report on Foreign Direct Investment in Nepal. Nepal Rastra Bank.

New Business Age. (2020, September 24). EDI Expected to Speed up Customs Clearance of Nepal Bound Goods. Retrieved from New Business Age: https://www.newbusinessage.com/Articles/view/12513

Paudel B. (2021, January 31). "Should we graduate from Least Developed Country (In Nepali)?" Kantipur Daily

Prasain, S. (2020, July 03). Nepal moves up to lower-middle-income country, says World Bank report. From The Kathmandu Post: https://kathmandupost.com/money/2020/07/03/nepal-is-now-officially-a-lower-middle-income-country-the-world-bank-says

Pushpa Raj Rajkarnikar, N. M. (2006). The Need for and Cost of Selected Trade Facilitation Measures Relevant to the WTO Trade Facilitation Negotiation: A Case Study of Nepal. Asia-Pacific Research and Training Network.

Razzaque, M. A. (2020). Nepal's graduation from the least developed country group: Potential implications and issues for consideration. UNESCAP.

Sala-i-Martin, X. (1997a). I just ran four million regressions. Working Paper No. 6252, NBER.

Sala-i-Martin, X. (1997b). I just ran two million regressions. American Economic Review 87: 178-183.

Sapkota, R. (2018, March 01). Govt wants Nepal to remain LDC. From The Himalayan Times: https://thehimalayantimes.com/nepal/government-wants-nepal-remain-least-develooped-countries

Shrestha, P. M. (2019, November 7). Why has Nepal failed to attract enough foreign direct investment? Retrieved from The Kathmandu Post: https://kathmandupost.com/money/2019/11/07/why-has-nepal-failed-to-attract-enough-foreign-direct-investment

The Kathmandu Post. (2018, August 27). Birgunj Inland Container Depot gets much needed upgrade. From The Kathmandu Post: https://kathmandupost.com/money/2018/08/27/birgunj-inland-container-depot-gets-much-needed-upgrade

The World Bank. (2021). Nepal Development Update: Harnessing Export Potential for a Green, Inclusive, and Resilient Recovery. World Bank Group.

The World Bank. (n.d.). Bangladesh. Retrieved from The World Bank: Data: https://data.worldbank.org/country/bangladesh

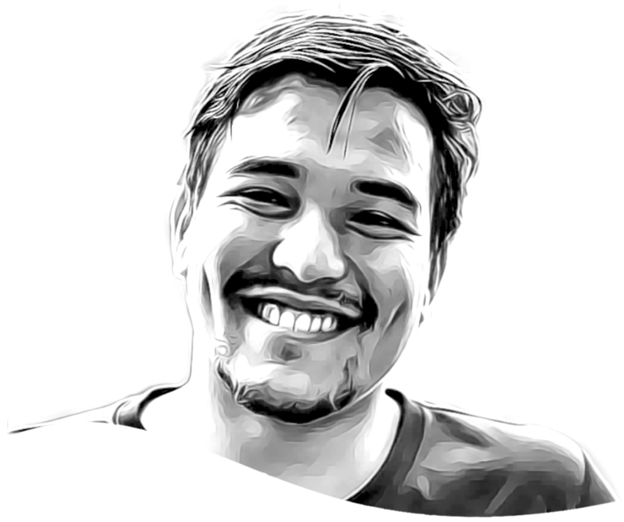
The World Bank. (n.d.). Doing Business 2020: Economic Profile Nepal.

U.S. Department of State. (n.d.). 2020 Investment Climate Statements.

United Nations Conference on Trade and Development. (2017). The Least Developed Countries Report 2016: The Path to Graduation and Beyond - Making the Most of the Process.

United Nations Department of Economic and Social Affairs Economic Analysis. (n.d.). Least Developed Country Category: Nepal Profile. From United Nations Department of Economic and Social Affairs Economic Analysis.

United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. (n.d.). Criteria for LDCs. From UN-OHRLLS.



Faultlines in Nepal's Social Security

- Prakash Maharjan

Social Security has been identified as a human right by the international community to protect the rights of the individual to live with dignity and justice. Nepal also provides space for social security programs though the institutionalisation of such programs has not been long enough. However, the number of programs that Nepal operates are very high for a developing country which has posed various challenges for its financing, operation and delivery. This paper describes the faultlines in operating social security programs in Nepal and provides few measures to address them.

Background

Social security schemes were first introduced in Germany in 1883, when the then Chancellor Otto von Bismarck introduced sickness insurance that were paid out of the contributions made by the employees and employers. This was followed by an introduction of law in 1884 that made accident insurance compulsory. Finally, a law establishing a pension for all workers in trade, industry, and agriculture from the age of 70 was passed in 1889. Later, Austria, Italy, Sweden and the Netherlands followed in the footsteps of Germany and initiated their own social security schemes. New Zealand and Denmark however, introduced provisions for old age without establishing social insurance schemes in contrast to Germany where the scheme was based on contribution from both employees and employers (Britannica Encyclopedia). Both New Zealand and Denmark introduced social insurance schemes that were not contributory and financed by direct taxation using means tested methods to identify the target population. Later on, countries initiated their own social security schemes where security was provided through a mixed method such as non-contributory pensions and contribution-based sickness and unemployment insurances in the United Kingdom.

Social security protections got worldwide recognition after it was clearly defined in the International Labour Organization (ILO) conventions and the United Nation (UN) instruments as a basic human right. The ILO defines social security protection as

> *"the protection that a society provides to individuals and households to ensure access to health care and to guarantee income security, particularly in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a breadwinner."*

It is a basic human right broadly defined as a system of contribution-based health, pension and unemployment protection, along with tax financed social benefits.

History of Social Security in Nepal

Nepal also provides different social security programs to its citizens. However, no proper historical evidence of the pension system in Nepal can be found but a system to provide annual lump sums to wounded soldiers returning during the First World War can be identified as the first social security program (National Planning Commission,2012). As per the report from National Planning Commission, 2012, social security systems in Nepal officially commenced in 1934 A.D. after the establishment of the Military Money Fund that promised one fifth of the salary as pension for retired soldiers. After that, in 1942 A.D. a pension was provided to those completing 25 years of civil service through Land Revenue Offices which was then distributed through the Central Bank, Rastriya Banijya Bank, and Nepal Bank Limited since 1976 A.D. Maternity leave for female government employees was introduced after the introduction of Civil Servant Act in 1992 and with the introduction of Labor Code in 1993, social security programs also started to include the private sector. The private sector employers were required to pay 50% of the wages for the sick and leave of up to 15 days each year, and in case of physical accidents and disability the employer was required to remunerate the employee for at least a year (National Planning Commission, 2012).

Only in 1994, a non-contributory social security, the old-age allowance pension was introduced that promised a universal flat allowance of Rs. 100 to all elderly above 75 years and in 1996-97, two additional social security programs were added, one for the helpless widows above the age of 60 and a disabled pension of Rs. 100 per month (Malakar, 2018).

Current Scenario of Social Security in Nepal

Social security in Nepal has grown to be a massive government project with the government operating seventy-six[1] different programs that can be classified into two types based on the method of their financing. One is the contribution-based social security and the other is non-contributory social security schemes. In the contribution-based scheme, contribution amount is deducted from an employee's salary with additional contribution added by the employer for an employee's protection whereas in the non-contributory scheme, as the name suggests, beneficiaries are not required to contribute for their protection.

There are mainly three types of contribution-based social security in Nepal – the Social Security Fund (SSF), the Employee Provident Fund (EPF) and the Citizen Investment Trust

1 As identified in the Social Protection Budget Brief prepared by UNICEF referring to a draft paper prepared by National Planning Commission of Nepal.

(CIT)[2]. For EPF, 20 percent is contributed to the fund under which 10 percent is deducted from an employee's salary and the rest is provided by the employer. For SSF, 31% is contributed where 11 percent is deducted from the employee's salary while 20 percent is contributed by the employer[3]. In the case of the CIT, an employee can voluntarily choose to contribute money. In Nepal, SSF has been made mandatory for private employees, meaning all employees and employers are required to enroll into the SSF except the permanent government employees[4]. For permanent government employees, EPF is mandatory.

Likewise, non-contributory social security covers ample number of programs. The World Bank, 2021 identifies 26 different non-contributory social security programs that include 21 social assistance programs and 5 labour market programs currently provided through different ministries. These programs are mainly directed towards the vulnerable population such as the elderly, disabled, widowed, children and the indigenous and are provided through banking channels.

Social Security in Nepal and the Ministries Involved

Operating seventy-six different social security programs has burdened the government as the social security expenditure of Nepal government has been increasing rapidly since the past decade. The main reason being the increase in the scope of the programs and the increase in the number of beneficiaries. A report on the income and expenses of the government for the year 2020/21 from the Office of Financial Comptroller General discloses that the expenditure made under social security is the third largest spending of the government, accounting for 16 percent of the government revenue and up to 4 percent of the Gross Domestic Product (GDP). The average social expenditure for lower middle-income countries was 3.9 percent of the GDP while that of South Asian countries was 2.7 percent in the year 2017 as mentioned by the Asian Development Bank.

Contribution Based

- Ministry of Finance
- Ministry of Labor, Employment and Social Security
- Ministry of Health and Population
- CIT

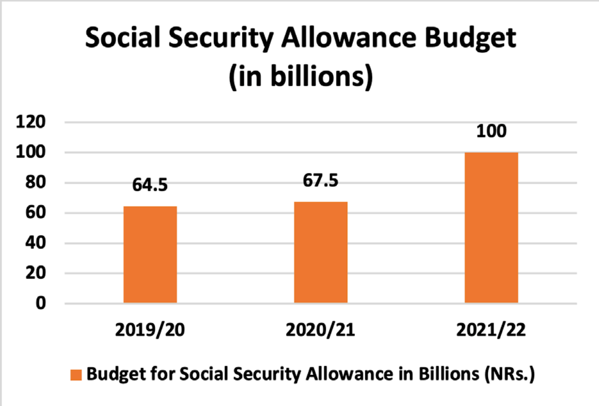
Non-Contributory

- Ministry of Home Affairs
- Ministry of Education, Science and Technology
- Ministry of Health and Population
- Ministry of Labour, Employment, and Social Security
- Ministry of Women, Children, and Social Welfare
- Ministry of Land Management, Cooperatives, and Poverty Alleviation
- Ministry of Urban Development
- Ministry of Industry, Commerce, and Supplies

The majority of this expenditure is made under the social security allowances provided by the government. As per the data extracted from Department of National ID and Civil Registration (DoNIDCR), the estimated government

2 There are other contributory based funds as well such as the National Insurance Fund but the scope of such funds is limited.
3 The total contribution to SSF is divided as: old-age pensions (28.33 percent); accident and disability (1.40 percent); dependent family security (0.27 percent); and medical, health, and maternity (0.7 percent on medical and 0.3 percent on maternity).
4 Those employees that have been appointed after graduating the nation-wide exams conducted by Public Service Commission.

expenditures will be NRs. 105 billion for social security allowances in the current fiscal year alone while the budget allocated for the same was NRs. 100 billion. This drastic increase in the expenditure of social security allowances is the result of the government increasing the rate of allowances for senior citizens, single women and the disabled by 33 percent from NRs. 3000 per month to NRs. 4000 per month (Shrestha, 2021).



Source: Ministry of Home Affairs, 2021

Types of Social Security Allowances in Nepal

SSA Type	Description	Number of Beneficiaries	[5]Allowance rate in NPR	Allowance for 2021/22 in NPR (in billions)	Composition of Total SSA Expenditure
Old Age Allowance	People that have reached 70 years of age	1316339	4000	63.18	59.98%
Widow Allowance	Women from any age group	359365	2660	11.47	10.89%
Old Age Allowance – Single Woman	Unmarried women, divorced or widowed women who have reached 60 years of age	277408	2660	8.85	8.41%
Old Age Allowance – Dalit	People from Dalit group that have reached 60 years of age	191307	2660	6.11	5.797%
Children from specified region	Children from specified region	798364	532	5.10	4.838%
Highly Incapacitated Disability Allowance	People who have been provided disability identification card of blue colour by the government	127696	2128	3.26	3.095%

5 Expected allowance calculated as per recent data available from DoNIDCR.

Full Disability Allowance	People who have been provided disability identification card of red colour by the government	63047	3990	3.02	2.865%
Dalit Children	Children from Dalit background under the age of 5	406979	532	2.60	2.466%
Endangered Caste	Endangered group such as Kusunda, Bankariya, Raute, Surel, Hayu, Raji, Kisan, Lopcha, Meche and Kuswadiya (Pattharkatta, Silkat, Kushbadhiya, Kuchbadhiya)	22688	3990	1.09	1.031%
Old Age Allowance - Karnali Region	People from Karnali region that have reached 60 years of age	21004	2660	0.67	0.636%
Total		**3584197**		**105.35**	**100.00%**

Source: Author's own calculation based on the data available in DoNIDCR

Faultlines within Social Security

Social security as a human right helps people live with dignity, equality, and justice (Mathema, 2012). However, with the increasing expenditure for the programs, there has been a growing concern regarding the financing, operation, and the delivery of such programs.

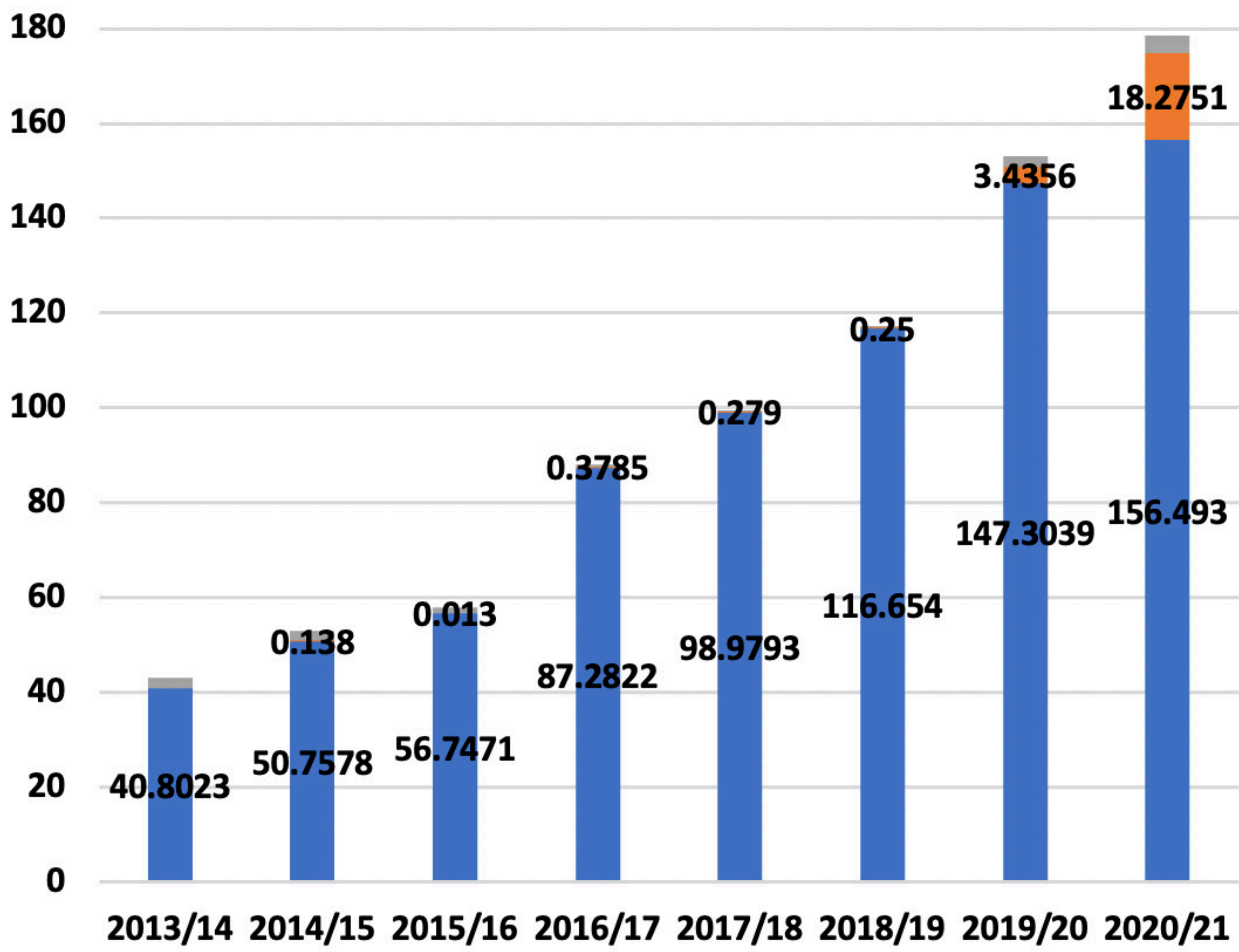
Financing Social Security Programs through Taxation

Nepal, being a low-income country cannot afford to operate seventy-six different social security programs especially now that the country is transitioning towards a lower-middle income country. The transition to a lower middle-income country means that grants as a source of financing budget is decreasing. In this situation, Nepal needs to either finance its social security budget through loans or through taxation. The budget details for the fiscal year 2022/23 discloses that the government used

NRs. 18 billion worth of loans to finance social security expenditure in the fiscal year 2020/21 which is significantly more than the loans required to finance social security the year before. Now, social security being an unproductive sector will not generate returns and financing it through loans will only add to the debt burden of the country.

Similarly, the growing Tax/GDP ratio - 13.4 % to 21.8 % since 2010 to 2020 (World Bank, 2019) - of the country suggests that most of the taxation reflect increased financing for social security programs of the country (United Nations Children Fund, 2020). As mentioned in the table, the Social Security Expenditure of Government over the Years, Nepalese government spent around 16 percent of its revenue for funding social security in the fiscal year 2020/21 which is expected to reach 20 percent of the government revenue in the fiscal year 2021/22 accounting 5 percent of the GDP. Given that the government revenue is increasing annually, social security expenditure's share within the government revenue has also been increasing by 2 percent annually, implying that taxpayers are carrying a substantial share of burden for funding social security programs of the country.

Social Security Financing (in billions)



Source: Budget Speech, 2022/23

Social Security Expenditures of Nepal Government over the Years

Years	Government Spending on Social Security (in billions)	Government Revenue (in billions)	Social Security to Government Revenue	GDP (in billions)	Social Security to GDP
2013/14	40.8023	410.8630	10%	1941.624	2%
2014/15	50.7578	411.8480	12%	2124.6498	2%
2015/16	56.7471	485.2390	12%	2248.691	3%
2016/17	87.2822	612.5975	14%	2599.234	3%
2017/18	98.9793	726.7176	14%	3031.034	3%
2018/19	116.654	839.6619	14%	3464.319	3%
2019/20	147.3039	841.3125	18%	3767.043	4%
2020/21	156.4930	976.3094	16%	4266.32	4%
2021/22[6]	233.6708	1152.4246	20%	4277.302	5%

Source: Budget Speech, Ministry of Finance, Various Years

Lack of Policy Coherence

As mentioned before, the government operates different contribution based social security programs along with the SSF. These programs have similar target groups but different policies. For instance, the national health insurance program and the SSF both provide insurance against medical emergencies but the amount of contribution for both these programs are different. The national health insurance covers up to NRs 100,000 for a contribution of NRs 3,500 for a household comprising of five members while the SSF covers up to NRs 100,000 for a contribution of 0.7 percent of individual workers' salary.

Likewise, the provision for contribution-based social security is different for the government employees and the private sector. The government has made it mandatory for the private sector to enroll in the SSF while for the government employees, there are different provisions based on the type of employment. Permanent government employees do not need to contribute to SSF and their contribution is sent to the EPF while employees on contract are required to contribute to the SSF. Employees of public institutions can choose on their behest until the government decides for them[7]. Moreover, the government for its permanent employees needs to contribute only 16 percent including the EPF (10%) and the pension fund (6%) while private employers are required to contribute 20 percent for their employees for the SSF.

This lack of policy coherence has resulted in biased treatment for the private sector by the government as the policy favors the government and public officials.

6 Based on revised estimate of expenditure as per budget speech for the year 2022/23.

7 Based on the conversation with the information officer of Social Security Fund.

No clear framework of operation

Social security falls under the jurisdiction of all three levels of government in Nepal. The constitution of Nepal states social security to be an exclusive power of the federal government as well as concurrent function of the federal, provincial, and the local governments. The absence of clear institutional mechanism and an integrated framework that sets clear roles for federal and sub-national governments has created complications in achieving the shared objective of protection especially when social security programs are mainly operated through federal budget with little room for subnational governments (World Bank, 2021). In Nepal, while the majority of the budget for social security programs are allocated to the federal government, the delivery of most of these programs are done by the local levels who rely on the guidelines issued by the federal ministries. The local levels are limited to maintaining statistics and monitoring compliance but are rarely involved in program development even when they are close to the target population.

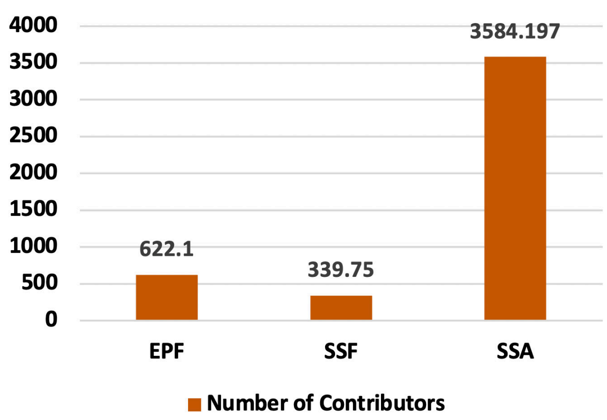
Spread of programs among multiple ministries

The country provides social security through multiple government ministries. United Nations Children Fund (UNICEF), 2020 identifies 13 different ministries that provide key social security programs in the country. Having different institutions provide social security will only impact the fiscal space as these programs will incur high administrative cost for the government and compromise efficiency in terms of service delivery. For example, the Ministry of Home Affairs (MoHA) provides scholarships to the family of the martyrs while the Ministry of Education, Science, and Technology also provides scholarship opportunities to students (United Nations Children Fund, 2020). These two programs can be operated through a single ministry rather than two different institutions.

Problem of multiple benefits

Till date, the government is yet to verify the actual vulnerable group of people who require social security. Individuals already listed in one program are also listed as beneficiaries in others which has increased the cost of delivering such programs. As per the Nepal Multi-Dimensional Poverty Index report, 2020, almost 17.4 percent of total population of the country is poor, meaning, the number of people that can be identified as poor is just over 5 million where as social assistance programs provide security to 6.8 million individuals and labour market programs cover about 0.2 million (World Bank, 2021). In total, the social security programs cover around 10.5 million individuals hinting that some individuals and households might be benefitting from multiple programs (ibid.). The fifty-eighth report from the Auditor General, 2021 also confirms that beneficiaries are receiving benefits from multiple programs as it discloses that as many as 170 local levels registered the same beneficiary on different programs and recorded expenditures even of beneficiaries that are already dead.

Number of Beneficiaries in EPF, SSF and SSA
(in thousands)



Source: Respective Website of each Program

Also, the report reveals that 38 local levels provided benefits to individuals that were not listed in the information system thus questioning the accountability of the government in terms of social security allowances.

Non-competitive programs

In case of contribution-based social security programs, the three major programs are not competing among themselves even when they target the same group of the population. The contribution-based social security is targeted towards the working population. However, the SSF has been made mandatory for private sector (most from the private sector are yet to enroll). As the government made SSF mandatory for private sector, EPF stopped enrolling private sector contributors in the fund limiting its services only for the public sector. However, the provision for receiving benefits under EPF, CIT and SSF are different. For instance, an employee enrolled in EPF can apply for loans after contributing for two years in terms of personal loans, one year in terms of educational loan and house loan whereas an employee enrolled in SSF can draw loans only if they have contributed for three years. Similarly, an employee enrolled in CIT can draw loans after two years of contribution with regards to the loans mentioned. In this regard, EPF and CIT seems lucrative for the employees but SSF has been made mandatory for private employees making the programs offered by the government non-competitive with each other.

Recommendations

Setting clear roles

Nepal, first and foremost, must prepare a clear framework regarding roles and responsibilities of each level of government regarding social security programs that help in achieving its objective. With each government level having clearly defined roles regarding social security programs, the country can then move towards integrating and coordinating such programs and data regarding it to avoid dual registration of beneficiaries in multiple programs as well as beneficiaries receiving multiple benefits. In Brazil, clearly defined roles and responsibilities between the provincial and local governments with the implementation of policy instruments have helped create an integrated information and delivery system. Brazil implemented a Unified System of Social Assistance (SUAS) that is operationalized through a single registry and the Index of Decentralized Management (IGD). The single registry helps in avoiding duplication while the IGD helps to estimate the transfer of resources (World Bank, 2021).

Nepal can also maintain an integrated information system where data of each beneficiary can be maintained and reporting of the programs can be done through the same system. Additionally, the information regarding expenditures, budget, modality of the programs can be made available to the general public through the same system so that transparency of the social security program can be maintained and suggestions regarding any program can be provided to the government.

Alternative methods of identifying the target group

Likewise, the government must identify alternative methods of mapping the target population for social security programs. As mentioned above, there are instances of beneficiaries receiving benefit from different programs along with registration of beneficiaries that do not require such protection. One such method to limit existing issues is to implement a means tested or proxy means tested assistance program to identify vulnerable population that requires social assistance. For this, certain criteria are stated and data are collected, maintained, and analysed and only those who fall below the said threshold will be provided with the social assistances.

Nepal can implement such interventions for certain programs through local governments that share close proximity with the citizens. Criteria specific to the targeted population and the respective programs can be developed to better identify the individual requiring assistance. Proxy/Means testing as a method of identifying target population has been used in many countries. For example, Colombia implemented such programs for subsidized health insurance and with several programs for conditional cash transfers, workfare, and scholarships for vocational training. Mexico used such intervention for conditional cash transfers. Similarly, in Armenia, such methods were used for humanitarian assistance and cash transfers and Indonesia used it for subsidized rice rations (Coady, Grosh, & Hoddinott, 2004). Implementing means tested or proxy means tested assistance will further make the government accountable towards the taxpayers as it will help in controlling the misuse of taxpayers' money as the actual population that requires protection can be identified through this method.

Social Security Programs through a single ministry

Nepal must bring all social security protection programs under one ministry, which in Nepal's case can be Ministry of Labour, Employment and Social Security (MoLESS). MoLESS acting as a focal ministry will make it easy to harmonize the policies and legislations guiding different social security programs ultimately reducing the cost of delivering such services. Moreover, identifying a focal ministry for spearheading the social security programs will help in integrating different fragmented programs with the same target group as well. Integrating similar programs and delivering it as one will help the government reduce the burden of allocating sources of financing which will ultimately lessen the burden on taxpayers and make the government more accountable.

The ministry can then carry out evaluations to analyze the effectiveness of social security programs in the country and take decisions based on the revelation. For example, Armenia initiated different one-off assessments and evaluations along with a Core Diagnostic Instrument (CODI)[8] assessment to map and analyze the overall social security system. Similarly, in Moldova, the lead Ministry produces annual social reports which discloses information on the main programs, coverage and spending (Sammon, Attah, & Carraro, 2020).

Voluntary and Competitive Programs

Nepal has made the contribution based social security mandatory. The government made provision of compulsion after two of the forced saving schemes - EPF and CIT were already present in the market. Here, the government should provide the option of allowing individuals to choose their own social security scheme based on their preference and remove the compulsion of being enrolled in SSF for the private sector and EPF for the public sector. Separating two different funds for employees of two different sector will deprive the employee from their right to choose the best alternative and also limit their option of choosing the best saving program available in the market.

Additionally, the government must make these programs competitive and align the benefits

8 CODI is a social protection analysis tool that take a SYSTEM approach to the analysis. It helps make an in-depth assessment regarding operation of the program as well as looking into specific administration aspects of the program. For more: https://ispatools.org/tools/CODI-English.pdf

these programs provide so that the dual treatment of citizens regarding contributions and the benefits can be omitted. Doing so will also reduce the costs incurred for the private sector as their cost of contribution is higher than that of the government.

Conclusion

Social security programs were brought forward to protect the vulnerable population and ensure their right to live with dignity. Nepal provides social insurance programs, social assistance programs and also labour market programs to protect the vulnerable population. However, these programs are fragmented among different ministries and target similar group of population which has only led to increase in the government expenditure. Furthermore, the popularity of such programs has led the government to increase the budget allocation and since social security programs in Nepal are mostly funded through taxes, it raises the question of optimum utilization of government revenues. Also, the problems faced while operating such programs and delivering services out of those programs, raise the question of transparency and accountability towards the government regarding the use of public money. The government must work towards making social security programs effective and efficient, so that the objective of such programs can be achieved and the target group of such programs can be well protected.

References

Asian Development Bank. (2019). The Social Protection Indicator for Asia: Assessing Progress. Asian Development Bank. Retrieved from https://www.adb.org/sites/default/files/publication/516586/spi-asia-2019.pdf

Britannica Encyclopedia. (n.d.). Social Security. Retrieved from Britannica: https://www.britannica.com/topic/social-security-government-program/Historical-evolution

Chaudhary, A. (2020). Contribution-Based Social Security Act: Policy Brief. Kathmandu: Samriddhi Foundation.

Coady, D., Grosh, M., & Hoddinott, J. (2004). Targeting of Transfers in Developing Countries: Review of Lessons and Experience. Washington: The International Bank for Reconstruction and Development.

Department of National ID and Civil Registration. (n.d.). Retrieved from https://donidcr.gov.np/

Employees Provident Fund. (n.d.). EPF Financials at a Glance. Retrieved from Employees Provident Fund: https://site.epfnepal.com.np/

Government of Nepal. (n.d.). Social Security Allowance Rate. Retrieved from Department of National ID and Civil Registration: https://donidcr.gov.np/Home/SocialSecurity

International Labour Organization. (n.d.). Facts on Social Security. Geneva: International Labour Office.

Kumar, R. (2019). Social Security Fund: Questions in Security (Samajik Surakshya Kosh: Surakshyamai Prashna). Himal Khabar Patrika, pp. 22-28.

Malakar, I. (2018). The Effectiveness and Relevance of Social Security Allowance in Nepal. Tribhuvan University Journal, 51-64.

Mathema, P. (2012). National Social Security Policy: A Reality Need for Nepal. Administrative and Management Review, 56-63.

Ministry of Home Affairs. (n.d.). Progress

Report for the year 2076/77.

National Planning Commission. (2012). Assessment of Social Security Allowance Program in Nepal. Kathmandu: Government of Nepal.

Office of Auditor General. (2078). Summary of Yearly Progress Report.

Office of Financial Comptroller General . (n.d.). Yearly Report of Income and Expenses of Government of Nepal, 2077/078.

Office of the Auditor General. (2021). 58th Annual Report of the Auditor general.

Sammon, E. M., Attah, R., & Carraro, L. (2020). Integrated Social Protection Systems in Europe and Central Asia Region. Oxford Policy Management and UNICEF.

Shrestha, P. M. (2021, August 26). Government mulls options to ease growing burden of social security allowances. Retrieved from The Kathmandu Post: https://kathmandupost.com/national/2021/08/26/government-mulls-options-to-ease-growing-burden-of-social-security-allowances#:~:text=The%20allowances%20increased%20to%20Rs68,from%20Rs3%2C000%20per%20month.

Social Security Administration. (n.d.). Alternatives to Social Security.

United Nations Children Fund. (2020). Social Protection Budget Brief.

Wagle, A. (2021, July 5). Making a mess of social security. Retrieved from The Kathmand Post: https://kathmandupost.com/columns/2021/07/05/making-a-mess-of-social-security

World Bank. (2019). Tax revenue (% of GDP) - Nepal.

World Bank. (2021). Social Protection: Review of Public Expenditure and Assessment of Social Assistance Programs.

Samriddhi, The Prosperity Foundation an introduction

Samriddhi, The Prosperity Foundation is an independent policy institute based in Kathmandu, Nepal. It works with a vision of creating a free and prosperous Nepal.

Initiated in 2007, it formally started its operations in 2008. The specific areas on which the organization works are:

i. Entrepreneurship development

ii. Improving business environment

iii. Economic policy reform

iv. Promoting discourse on democratic values

Centered on these four core areas, Samriddhi works with a three- pronged approach—Research and Publication, Educational and Training, Advocacy and Public Outreach.

Samriddhi conducts several educational programs on public policy and entrepreneurship. It is dedicated to researching Nepal's economic realities and publishing alternative ideas to resolve Nepal's economic problems. Samriddhi is also known for creating a discourse on contemporary political economic issues through discussions, interaction programs, and several advocacy and outreach activities. With successful programs like "Last Thursdays with an entrepreneur" and "Policy Talkies", it also holds regular interaction programs bringing together entrepreneurs, politicians, business people, bureaucrats, experts, journalists, and other groups and individuals making an impact in the policy discourse. It also hosts the secretariat of the 'Campaign for a Livable Nepal', popularly known as Gari Khana Deu.

One of Samriddhi's award winning programs is a five day residential workshop on economics and entrepreneurship named Arthalya, which intends to create a wave of entrepreneurship and greater participation among young people in the current policy regime.

Samriddhi is also committed towards developing a resource center on political economic issues in Nepal called Political Economic Resource Center (PERC) currently housed at Samriddhi office. It also undertakes localization of international publications to enrich the political economy discourse of Nepal. Samriddhi was the recipient of the Dorian & Antony Fisher Venture Grant Award in 2009, the Templeton Freedom Award in 2011 and the CIPE Global Leading Practice Award in 2012.

(For more information on the organization and its programs, please visit www.samriddhi.org)