

(Livelihood)

**REALITY CHECK OF LIVELIHOOD VULNERABILITY AREAS IN
RURAL AND URBAN COMMUNITY OF BHUTAN**

Dissertation Submitted to



The IIHMR University, Jaipur

For the partial fulfillment for the award of the degree of
Master of Business Administration (MBA)

In

Rural Management

By

Chencho Wangdi

Under the supervision and Guidance of

Dr. Gautam Sadhu

2021

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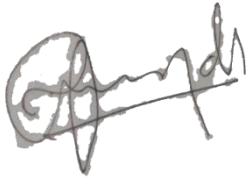
Under the supervision and Guidance of

Dr. Gautam Sadhu

2021

DECLARATION BY STUDENT

I hereby declare that this dissertation “Reality check of livelihood vulnerability in the rural and urban community of Bhutan” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

A handwritten signature in dark ink, appearing to read 'Chencho Wangdi', with a stylized, cursive script.

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TO WHOM IT MAY CONCERN

This is to certify **Mr. Chench Wangdi** bearing CID No.11913001197, who has Interned w.e.f 26th April to 10th June, 2021. Upon my observation, I found him very polite, sincere, honest, punctuality, creative and dedicated towards given task. He did not fail to carry out his responsibilities assigned to him.

He has not only enjoyed good personal relationship with the colleagues but also gained admiration from the Office; no grievances reported relating to his work style from staff and community.

Considering the ways he works the office and his achievements, he is seen as one of the staff who would be able to shoulder any responsibilities effectively. We are sure his experience, knowledge and enthusiasm will contribute immensely in whatever endeavor he undertakes.



(Sonam Tshering)

Human Resource Officer

Logo on the left: Emblem of the National Award of Merit (Gold) received from His Majesty The King on the 109th National Day

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CERTIFICATE

This is to certify that dissertation “Reality check of livelihood vulnerability in rural and urban community of Bhutan ”is a record of the research work undertaken by Chenchow Wangdi in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical

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ABSTRACT

This research study which has focused on the livelihood vulnerability of Bhutan mainly tries to go into deep and give the readers many insights with regard to the various vulnerability as far as livelihood is concerned. It distinguishes between the livelihood vulnerability intensity of Bhutan with other countries. The key objective of the study is to know how is the livelihood vulnerability in Bhutan different from other countries and also To be able to pass a judgment on whether or not there has been any changes after the implementation of various livelihood programmes in Bhutan. Three methodologies has been incorporated in order to get the full required data and information in completion of the research study. Those three methodologies are inclusive of the following: firstly, primary data such as questioning the concerned officials, livelihood experts, and also key informant interview. Secondly, secondary data comprise of web browsing through official livelihood programmes of both international as well as in country civil society organizations, district websites and last reported data. And in the third, by use of modern technology such as the online questionnaire. The study tried to use the SPSS software for further detailed outreach but due to very limited data on it and not to forget the Covid-19 restrictions in the country. After doing all the study the result has been more than what I had expected and a new learning for myself. The result has encouraged me to explore more of the study by going into the field in near future. In most of the livelihood vulnerabilities incidents the problem has been mostly from the rural corner and least from the urban region but in the case of Bhutan the vulnerability as reflected are both from urban as well as rural corner considering own problems. What the study would conclude is trying to develop a unique strategy that would not only exhibit the environmental circumstances but also try to find a way to bring out all the vulnerabilities without having to dismantle individual feelings.

Key words: Livelihood, Vulnerability, Programmes, Methodologies

ACKNOWLEDGEMENT

I am really grateful that I managed to complete my study report and compile every data within the given time bound. This research study in times of the current pandemic situation would not have been completed without the co-operation from my university mentor Sir Gautam Sadhu (Dr) for providing me with the required feedback and suggestions, my rural management batch mates (batch of 2019 – 2021) for taking out time for my online questionnaire and specially Madam Sonam Pem (ED of TF) for clearing out my doubts with regard to their annual report, Madam Roseleen Gurung (PO of TF) for her feedback and suggestion with regard to my presentation, Sir Pema Lhendup (Asst Adm of TF) & Sir Sonam Tshering (HR of TF) for their continued support and other staffs for providing us small activities that helped us in completing my internship report apart from research report. Without their concrete support my study would not have been fulfilled.

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ABBREVIATION

1. ABS.....Ability Bhutan Society – A public benefit organization
2. BAOWE.....Bhutan Association of Women Enterprises – A Non-profit organization for women upliftment.
3. Covid-19.....Corona Virus 2019 – A large family of virus that causes serious of illness leading to death in many cases if not treated nicely.
4. CICL.....Child in Conflict with law – A law for the childrens.
5. CSO.....Civil Society Organization – An organization whose ultimate objective is to look after the livelihood of the disadvantage family.
6. DPAB.....Disabled Persons Association of Bhutan – An association of disabled persons.
7. Dr..... Doctoral – An academic degree awarded by a university.
8. ED.....Executive Director – A member of board or firm and an employee and has management responsibilities.
9. GNH.....Gross National Happiness – A concept in discovered and followed by the country of Bhutan to measure their happiness.
10. GDP.....Gross Domestic Product – A concept to measure the economy of any country.
11. GEF.....Global Environment Facility – Which provides for the protection of the environment.
12. HR.....Human Resource – An individual who looks after the day to day affairs of the employees and also their problems and concerns.
13. HH.....Household – A house and its member.
14. PO.....Program Officer – A person who oversees the development of an organizations programs.
15. RENEW.....Respect Educate Nurture Empower Women – A Non-profit organization helping to empower women genders.
16. SPSS.....Statistical Package of Social Science – A software used to find out the interactive side of a data.
17. SDG.....Sustainable Development Goal – Are a combination of 17 interlinked goals with the objective to achieve future sustainability.
18. STD.....Sexually Transmitted Disease – An infectious disease passed on from one person to another through sexual contact.
19. SHG.....Self Help Group – An association of women as well as men genders with the prime objective of community development and livelihood improvement.
20. SABAH.....SAARC Business Association of Home based workers – An association of home based workers within the SAARC members.
21. TF.....Tarayana foundation – Name of an organization registered under the CSO act of Bhutan.

22. UNDP.....United Nation Development Program – An international organization who provides help and fund for the development of an under developed country.
23. UNICEF.....United Nation International Children Fund – An international organization which provide fund for the care and protection of children in danger.

CHAPTER 1

INTRODUCTION

As per dictionary meaning, “Livelihood is a means of securing life by way of providing all the required needs and wants for oneself or a group and finding ways to prevent any kind of shocks or unprecedented situation.” There has been different meaning of livelihood and vulnerability depending upon an individual or groups experience and knowledge. Bhutan is a population of only close to 8 hundred thousand and more than half of the people lives in the rural areas as per recent population data. Given the various livelihood situation in and around the world, even though Bhutan is considered as a gross national happiness country still we cannot deny that the prevalence of livelihood vulnerabilities can be assessed in both the rural as well as urban part of Bhutan.

Livelihood is a survival word in which a household live is depended upon the activity which they do in order to sustain their lives, and vulnerability is defined as those risk areas to which an individual or a household is accustomed to. In combination livelihood vulnerability can be referred to as the risk areas of an individual or group whose livelihood is considered uncertain due to the unpredictable environment they are living in. The Livelihood of people living in different parts of the world are considered very much vulnerable to many situations unheard of due to lack of data and the political intervention on the population coverage for the complete data acquirement. The vulnerability index of livelihood in and around the world are measured differently depending upon the place, their law and situation. Livelihood seems like a niche word but if we go about doing research on it then it is a very huge word consisting of lots of options and situations. And vulnerability is something which cannot be prevented fully or ignored as the consequences can be life threatening, So the various research experts consider livelihood vulnerability index as a way to solve or minimize the overall risk associated.

There has been a lot of ups and downs pertaining to livelihood and its associated vulnerabilities in and around the world. The maximum vulnerabilities has been from rural areas keeping in mind the wide range of resource unavailability, lack of proper road connectivity and political intervention in many cases. Despite of the many livelihood interventions implemented over the course of time still there has been unprecedented problems from all over the globe. Some problems are due to the natural calamities and human errors while others are due to human selfish activities arising from political interest. There are still many other vulnerability areas that are still left unexplored either due to political intervention or unknown reasons.

Just like the case above even in Bhutan there shown a lot of both rural as well urban livelihood vulnerabilities. In the case of rural areas the vulnerability has been arise due to lack of better road connectivity, natural calamities, huge government projects that has lead to land and forest degradation and other political promises that has failed. In terms of urban the most prominent problem as per my knowledge is due to water scarcity during the summer season, housing problems, and unemployment problems which has lead to many youths consuming drugs, involving in group fights and also getting stigmatized by own family members.

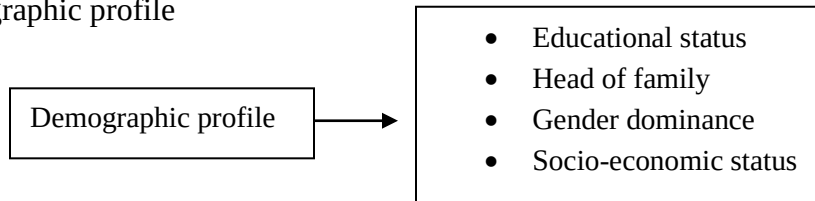
CHAPTER 2

1.1 Conceptual framework

As the research study could not be done as per the synopsis mainly due to time limitations and covid-19 restrictions, the framework applied here has been changed due to circumstances mentioned. Nevertheless it has been incorporated with the help of few ideas from the internet as well as study materials during the course of rural management.

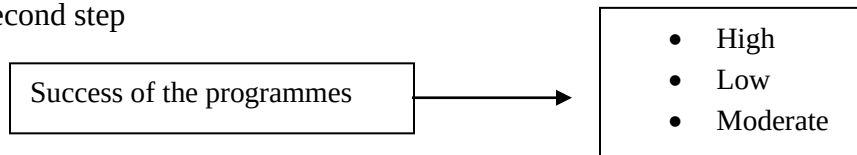
a) First step

Demographic profile



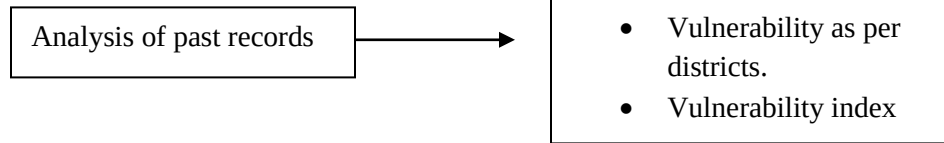
The research was not able to collect the educational status of the household members, the member that takes charge in the family and also the family member in terms of gender dominance as this could have been an upper hand in finding the most common but impactful vulnerability. Study report has been compiled based on wholesome livelihood vulnerability by taking into consideration the socio-economic status of the beneficiaries before and after any livelihood programme.

b) Second step



In the actual synopsis the second step was based upon the self esteem of the household members but later due to circumstances it has been changed to success scale of the programmes. All the programmes intervened for the livelihood vulnerability reduction has been explored both primarily as well as secondarily across the country. The maximum to the minimum reductions has been found out and has also been categorized in terms of numbers. Under this step all the fruitful result of the project completion of the different districts has been reflected in this study report.

c) Third step



Due to the pandemic circumstances the study has a little more weight age of secondary information. Past data of many other civil society organizations has been analyzed such as Tarayana foundation, RENEW, BAOWE and SABAH Bhutan. Their vulnerability areas has been identified based on their findings, gender affected in terms of RENEW and BAOWE has been given more focus as many study has found women gender to be most vulnerable. Even vulnerability in- terms of district has been categorized from high to low and finally which are the areas showing heavy vulnerability and in which district.

CHAPTER 3

Review of literature

A brief review of some of the available literature dealing with livelihood attempted in this chapter. The purpose of review of such studies is to see, as far as possible, the problems to which they paid their attention, the questions they addressed themselves to, the method of enquiry followed, the type of information collected and analyzed, and the conclusions they came to. Such a review would help us not only to formulate our enquiry in a meaningful way but also avoid methods that are questionable in character. The review reflects on what the research what to focus on and how the entire work will go on.

Leo J De Haan's (2012), The livelihood approach: a critical exploration, erdkunde: 2012.04.05, DOI: 10.3112, vol 66, issue 3 pages 345-357 It focuses on how we can go about the livelihood and the questions pertaining to it in this unprecedented era. It not only lets the reader have a better conceptualization of sustainable livelihood but also reflects on the geography of it. Unless the whole concept of sustainable development does not get mixed up with the biasness of actor-cum-local perception, the conclusion is that a geographical conceptualization of 'development and environment' may benefit from it. On the other hand the combination of non-equilibrium idea may expand the man and land relation analysis and open a new way to the idea of globalization effects. The concept of Globalization gives rise to new variety of geographical entities and, as livelihoods adapt, they will shape constantly shifting regions with specific man-land arrangements

Amuzu, J., Kabo-Bah, A. T., Jallow, B. P., & Yaffa, S. (2018). Households' Livelihood Vulnerability to Climate Change and Climate Variability: A Case Study of the Coastal Zone, The Gambia. *Journal of Environment and Earth Science*, 8(1), 35-46 discusses on the how climate change is a vulnerability to our livelihood in the coastal region in Gambia and how they mitigated it. It tries to find out the sensitivity of environment to the variation in the climate change and the different adaptive measures applied for execution. It explores the concept of livelihood vulnerability index. The whole analysis was done based on quantitative data from primary sources such as small holding farmers by KII and sampling method. On the other hand the idea of exposure, adaptiveness and sensitivity gives a broader understanding of the concept discussed above. Nevertheless the concept discussed above support by the idea of E-S-A gives a clear understanding of the how the region was able to withstand the maximum damages and how they intervened it.

Hoque, M. Z., Cui, S., Xu, L., Islam, I., Tang, J., & Ding, S. (2019). Assessing agricultural livelihood vulnerability to climate change in coastal Bangladesh. *International journal of environmental research and public health*, 16(22), 4552. It focuses on the extent of the vulnerability of the climate change on the agriculture based livelihood of Bangladesh. It raises question on how can an integrated approach be sufficient enough to address the agriculture based livelihood vulnerability and how it was able to overcome the issues pertaining to the problem

focused on. The framework applied here was affiliated to the Exposure, adaptive & sensitive (E-S-A) method for the research work for which different regions from Bangladesh was selected as a sample place. Moreover the E-S-A framework was further disintegrated into three sections. The main intention behind this whole study was to find out the diverse range of indicators that has come out after the in-depth application of the framework used in this case.

Daze, A., Ambrose, K., & Ehrhart, C. (2009). Climate vulnerability and capacity analysis handbook. *Care International* puts a light on how the global phenomena of climate change has had affected the lives of those living in the most vulnerable regions. It addresses the questions on how many development related programs along with the approach by CARE was in capacity to reduce the overall vulnerability index in the most fragile environment to the most marginalized group of households. In the case of this study, it discusses on the method called as the CVCA (climate vulnerability and capacity analysis) which integrates human capital with science data with the purpose to develop a concrete strategies that would be able to be resilient enough to withstand any extent of climate vulnerabilities. It uses the knowledge and understanding of the general public and compare it with actual science data to get the desired result.

Alam, G. M. (2017). Livelihood cycle and vulnerability of rural households to climate change and hazards in Bangladesh. *Environmental Management*, 59(5), 777-791 pictures on the decrease in the productivity of the land of Bangladesh owing to the issue of river bank erosion arising from the various problems of climate change and affiliated hazards. It raises questions on how the climate change lead to reduced land productivity and how the strategy applied had helped in resolving the vulnerabilities. In order to reduce the livelihood vulnerabilities by climate change two frameworks has been incorporated together i.e., the vulnerability index of livelihood and the vulnerability index of climate and these was done based upon the framework of intergovernmental panel climate change mainly for the purpose of getting the primary cause of the issue and to develop a well defined strategy for this.

Macchi, M., Gurung, A. M., & Hoermann, B. (2015). Community perceptions and responses to climate variability and change in the Himalayas. *Climate and Development*, 7(5), 414-425 focuses on the problem that the climate change can bring with it and the extend of unpredictable damage on those residing in the Himalayan regions. The question addressed in this study was directed towards the area and length of destruction that climate change can bestow upon the two Himalayan regions in India and other two Himalayan regions such as Nepal and Bhutan. In order to get the required data the concept of community based vulnerability and capacity assessment was applied which utilized the strategies like reducing vulnerability and increasing resilience among the rural community. The core motive was get the perception and the immediate responses from the community member with regard to the variation in climate and change in the Himalayas.

Nanavaty, R. (2020). Pandemic and Future of Work: Rehabilitating Informal Workers Livelihoods Post Pandemic. *The Indian Journal of Labour Economics*, 63(1), 151-155

focuses on how all the daily wage earners got affected badly by the pandemic specially the informal workers in case of women in particular who can get funds to take forward their livelihood during this pandemic but they prefer getting a sustainable work rather than depending upon the a short term fund. The question that is being raised here is about being able to sustain a livelihood even after the pandemic would be possible considering the damage already caused by the situation. The strategy used here was on rehabilitating the informal workers livelihood by giving them opportunity to revive their livelihood. The data for the strategy was collected by doing three different surveys on 1800 selected members for a period of three months.

Sujakhu, N. M., Ranjitkar, S., Niraula, R. R., Salim, M. A., Nizami, A., Schmidt-Vogt, D., & Xu, J. (2018). Determinants of livelihood vulnerability in farming communities in two sites in the Asian Highlands. *Water International*, 43(2), 165-182 reflects on how vulnerable the livelihood of the farming community in two regions in the Asian highland has been made by the variation in the climatic condition. The question raised in this study was pertaining to the frequency of damage different climate affiliated conditions can cause at the highlands. The concept applied here was based upon the existing E-S-A (exposure, sensitivity & adaptive) method with the main focus being the vulnerability indicators. Semi-structured interview questions and FGD was done to collect primary data to execute the E-S-A method, and the end result was that flash flood was identified as the core calamity behind the whole vulnerability situation.

Nanavaty, R. (2020). Pandemic and Future of Work: Rehabilitating Informal Workers Livelihoods Post Pandemic. *The Indian Journal of Labor Economics*, 63(1), 151-155 shines its light on the situation where in the women informal workers wants a sustainable work rather than relying their livelihood on some kind of charity which they are aware that it will be only for short duration. The question that is being raised here is on how the pandemic increased the livelihood vulnerabilities of the women informal workers in India who belonged to the SEWA (self help women association) group. They had implemented their strategy by doing a survey of 1800 selected members for w period of three months and the result showed 67 % women lost job due to the pandemic. Rehabilitating them was the best remedy to revive their livelihood, so, in order to accomplish they had started a STFC (sewa trade facilitation center) where in they not only provide the workers with the right skill development training but also create a market for their product.

Moret, W. (2014). Vulnerability assessment methodologies: A review of the literature. *Washington, DC: FHI*, 360 focuses on the results of the different methodologies applied in assessing the livelihood vulnerabilities and how it could change the policy making systems. In line with this the question that was addressed here was pertaining to how and what policy can be pinned upon in order to have a strong policy that can be used in all situation at all times. In order to make this happen South Africa had been selected with the intention to assess methodologies for finding out the vulnerability index. South Africa vulnerability framework was applied to get the desired result where in the framework was based on the concept of community

level action where its primary concern was the household or the individuals. The framework was done based on two levels of method such as the macro level which is applied at country level considering the population of the whole country and meso level considering just a sample population from the census data for a period of five months. The vulnerability index of the parent and their childrens were taken into consideration during which information such as “how the household members could access the food and cash depending upon their economic background.

Acosta, P. A., & Avalos, J. (2018). The Philippines Sustainable Livelihood Program highlights on whether the concept of seed capital fund for providing funds to the marginalized households are really living up to the expectation of the practitioners or not. It builds linkages with other programs which are mainly focused on sustainable livelihood development and it combines a series of sustainable livelihood program with other program to have a fruitful result. It raised question with regard to the how unique and achievable is the sustainable livelihood program of the Philippines. The general framework it has adopted was based on two tracks which comprised of (1) micro-enterprise development which offers the participants with the required level of training and funding in case they want to start a small business, (2) employment facilitation which deals with offering job opportunities at local level in case if prefer not to start a business. All of those realistic expectations has an opportunity of being well achieved without being discarded.

Smith, G. (1989). *Livelihood and resistance*. University of California Press focuses on the various hurdles that anthropology has to go through while doing research on a hot topic like livelihood. The many criticism that those anthropologies had to go across in order to get the required information as per the requirement of the research. It raises the question of how there are association between the livelihood development and the resistance of individual towards different livelihood vulnerability situation and also how those scenarios create social and economical fear, humiliation leading to many livelihood vulnerabilities. The method of enquiry was based upon PI (personal interview) during which the researcher had to spend couple of days with the key informant and ask them question pertaining to their current livelihood and resistance to the different vulnerabilities surrounding them.

Lazarte-Hoyle, A. (2017). *Understanding the drivers of rural vulnerability towards building resilience, promoting socio-economic empowerment and enhancing the socio-economic inclusion of vulnerable, disadvantaged and marginalized populations for an effective promotion of Decent Work in rural economies* (No. 994961790502676). International Labor Organization focuses on the livelihood vulnerability in the context of rural community where women are exposed to human trafficking, extortion etc. Keeping this in mind the question here is pointing towards the real drivers that are leading to such vulnerability in the rural areas despite of various stringent measures. As per previous year record those belonging to the disadvantaged and marginalized groups are the ones who fall victim to the rural vulnerabilities. The international labor organization tries to identify the various drivers that leads to rural vulnerability and comes up with interventions in order to take them out from such situation and

support them on their way forward. The ILO provides decent jobs to them which had simple agendas which would not only give them enhanced income but also improve their livelihood.

Niehof, A. (2004). The significance of diversification for rural livelihood systems. *Food policy*, 29(4), 321-338 focuses on how the livelihood systems especially in the rural areas would turn in case they try to make any diversification to improve their livelihood. The problem is pertaining to the rise in different vulnerabilities in case diversification is being made. The question that arises is what drives those vulnerabilities and in which part of the rural area. The concept here was based upon 360 previous research papers all reflecting on the livelihood affiliated activities. Furthermore the empirical evidence was the method initiated to acquire the required level of information.

Shivakoti, G. P. (2013). *Livelihoods and Fishing Strategies of Small-scale Fishing Households Faced with Resource Decline: A Case Study of Singkarak Lake, West Sumatra, Indonesia* (Doctoral dissertation, Asian Institute of Technology) focuses on the case of the Singkarak lake situated in Indonesia whose livelihood was depended upon their small-scale fishing households which was faced with the problem of resource decline. Keeping the problem in mind the question that was raised was whether the problem of resource decline was affiliated to climate change and the environmental degradation or were there other major points that they were missing in between. In order to find out why, the concept of sustainable livelihood approach which involved a series of procedures (stores, resource, claim and access) was taken into consideration for eliminating the issues. For this an underwater species called the bilih which had a commercial value in the market was chosen. The underwater species which they considered does not seem sustainable keeping in mind its resistance and adaptiveness to the deteriorating water quality. One cannot simply assume the commercial value of a species based upon existing data as even it falls short of research also.

CHAPTER 4

RESEARCH GAP

During this point is of pandemic there is a growing concern on how the livelihood of the rural as well urban community be managed. How the rural livelihood can be sustained further and urban livelihood can be maintained. The most common things pointed out in various literatures discussed above is concerning the impact of the climate change on the livelihood and the strategies discussed are enormous and repetitive.

The experience of the livelihood experts depends upon their physical research done but are confined to time bound limit and limited to the environment and ones words. Their ability to come up with an effective and sustainable strategy is completely relied on how they use the environment as their study point and the way they empathize with those individual or group they deal with.

The study here will not only incorporate the already existence data but also further question on the reported data and try to find a match between them. It will not only explore the rural livelihood but also the urban side.

RESEARCH QUESTIONS

1. How has the livelihood status changed in the rural population of Bhutan over the course of time?
2. What are the multiple livelihood vulnerability index seen in the GNH country?
3. What portion of the district has been the receiver of the livelihood interventions by Tarayana foundation?

RESEARCH OBJECTIVE

General:

1. To be able to understand the vulnerability areas and its intensity in Bhutan
2. To know how is the livelihood vulnerability in Bhutan different from other countries

Specific:

1. To be able to pass a judgment on whether or not there has been any changes after the implementation of various livelihood programmes in Bhutan.
2. To find out the how the SHG of Bhutan works.
3. To find out how the interventions are achieved despite of the high terrain.

RESEARCH METHODOLOGY

Design	Place	Population	Period
The study is a mixed method design. It uses the qualitative approach to interpret the quantitative data and further more combines the information from the company's annual report and individual staffs.	As per the organization's annual report (Haa, Dagana, Samtse, Trashigang and Mongar)	Selected beneficiaries	Between 2003 and 2020

All the required and important data will be collected using three methods which comprise of primary, secondary and the use of software. These methods would play a key role in completion of the study report in given time bound.

1.1.1 Primary data:

- a) The concerned officials working for Tarayana foundation would be questioned with regard to the livelihood and its vulnerability programmes and it changed the livelihood of the target groups.
- b) Key informant interview of the internal stakeholders as well as the external stakeholder such as the livelihood programme beneficiaries would be interviewed via telephonic conversation. FGD (focused group discussion) would not be done due to the restrictions.

1.1.2 Secondary data:

- a) More information would be compiled from other district government websites that has got a lot to do with livelihood vulnerability.
- b) As mentioned in the conceptual framework the last reported data from selected CSOs would be gathered for in-depth study.

1.1.3 Use of software:

- a) SPSS would not be used due to data limitations and covid-29 restrictions but online questionnaire would be created and send to my rural management mates batch of 2019-2021 and also to the staff of Tarayana foundation. The result would be further analyzed in four ways (man, women, fresher and experienced).

CHAPTER 5

RESULTS

1.1 Livelihood status of Bhutan based on 17 SDGs: challenges & the way forward

Livelihood situation in Bhutan may seem really favorable and acceptable considering the various available records from within the country. These records point towards a neutral livelihood status in Bhutan depending on district's environmental conditions and the type of livelihood they have in their region. As per 2019 survey, about 58.39 percent of populations in Bhutan are residing in the rural region so, by these figures one can assume that more than 50 percent of the Bhutanese populations are into the agriculture livelihood. Despite the promising percentage still the Bhutanese livelihood states in rural region are not acceptable considering their expectation of the rural population. The main reason is that the urban consumers prefer buying vegetables and fruits from our neighboring country rather than own local product due to the price advantage which is sold at a very high rate in Bhutan. The prices of vegetables and fruits are high in Bhutan as it is very organic and free of chemicals, for that reason rural vendors sell their cultivated goods at a high price. This price situation can also be seen during the ongoing pandemic as the vegetables and fruits are being sold at an alarming price. Our government is applying various measures mainly to buy the cultivated goods of the rural farmers and make it available at an international platform. This will not only encourage the rural farmers to cultivate more but also improve their livelihood status.

The 17 sustainable development goals has been the primary element of every developmental planning measured and mitigated in Bhutan. A widely known fact about Bhutan is that it has pledged to remain carbon neutral by maintaining 62 percent of forests cover regardless of whatever challenges it comes across in due process of time and circumstances. Over the course of time there has a lot of conferences and webinars pertaining to the 17 sustainable development goals and the measures to mitigate all the possible hazards that can follow.

1.1.1 Present situation and challenges of three districts concerning 5 SDGs

a) District: Dagana:

Sustainable developmental goal 6 Clean water & sanitation	
situation	✓ Seasonal variation caused by the climate change ✓ 15 years ago the villagers had to dig holes to get access to water. ✓ They used to walk 2 hours to get water from the nearest streams and springs. ✓ The village community believed water shortage to be due to the disharmony caused by neglect of religious practices as they had zero knowledge about the climate change. ✓ Improper toilet and open defecation as they did not know about hygiene.

challenges	✓ Current water sources drying out due to the climate change. ✓ Water source identified is very far. ✓ Limited fund to make the identified water source accessible to all. ✓ Pit toilet had been constructed to improve hygiene and make the villagers know the importance of toilet but was difficult to use due to distance. ✓ The pit toilet was not friendly towards certain groups of people such as senior citizens, people with disabilities, pregnant women and small children. ✓ The village community prefer personal flush toilet but the problem of fund availability, supply or required materials and access to water makes it difficult to fulfill it.
Importance in Livelihood	Clean water and sanitation is not only important for the billions of populations in and around the world but also it is the important for the small population of Bhutan as it plays a pivotal role in the enhancement of livelihood especially for rural proportion. Water is first most important factor when the GDP is concern as the production of electricity is depended upon the water. Water as we know has always been a problem both in the urban as well as rural Bhutan even though clean water is not a huge problem in the urban areas when compared to the rural areas. As far as rural area is concern, forget about getting a clean water and trying to improve the sanitation part the availability of water for other works mainly the agricultural works are not easily accessible at all level.

Sustainable developmental goal 7 Affordable and clean energy	
situation	✓ Biogas form of cooking has not been adopted fully. ✓ Electricity is not accessible in all corners of the district.
challenges	✓ The global warming is taking a toll as the trees are dying due to very less rainfall. ✓ The collection of fuel wood is shrinking as people are not collecting it in a sustainable manner. ✓ As fodder for cattle cannot be grown in a swift manner, considering biogas for cooking purpose is not easily assessable.
Importance in livelihood	Affordable and clean energy is accessible but not for all livelihoods due to various problems that even we are not known. Some of the known reasons are due to the type of settlement being on the high terrain, difficulty in reaching the materials for energy generation at the rural parts due to unavailability of proper farm roads.

Sustainable developmental goal 11 Sustainable cities and communities	
situation	✓ High humidity during summer in the one storied houses and huts accompanied by poor ventilation. ✓ The heat and humidity in the houses leads to snakes entering making safety an issue during summer season.
challenges	✓ Making timber extraction accessible for the outsiders has made timber insufficient for the respective community itself. ✓ Fear of heavy wind and unprecedented earthquake causing damages to the pure old two storied houses and huts.
Importance in Livelihood	Sustainability being one of the four pillars of GNH of Bhutan is also an integral part of the livelihood of the concerned district. As timber is their main source for livelihood option which they as a community are trying to sustain for their future.

Sustainable developmental goal 12 Responsible consumption and production	
situation	✓ They farmers grew very less crops that also for self consumption. ✓ During the lean period their crops gets consumed and they have no other option than to purchase new stocks from outside their villages. ✓ Whatever they cultivate is of very limited quantity which is either sold for income generation or self-consumed ✓ The men go out from their community to do labor work during off season in order to earn money for food and family.
challenges	✓ Seasonal variation in the rainfall damages the crops as the seeds gets eaten by the insects. ✓ Too much of dependency on imported foods could actually reduce their sustainability in life.
Importance in livelihood	As it is clear that the community has an imbalance in the consumption and production of livelihood, and they give more preference to outside purchased food. The kind of livelihood which they adopt during the course of time is indicating less of sustainability which can be an alarming factor in the future.

Sustainable developmental goal 15 Life on land	
situation	✓ Seasonal fluctuation in the lake. ✓ The problem of erratic rainfall has been there since 2015. ✓ Deforestation due to construction of farm roads and power transmission lines. ✓ The villagers do not collect the non-wood forest product due to the fear of wild animal encroachment. ✓ They are forced to maintain a ship wise duty to guard their crops at night.
challenges	✓ Wild animal damaging their crops has been the biggest challenge second to erratic rainfall. ✓ Many measures have been applied but none proved to be effective for a long term.
Importance in livelihood	Since the year the outsiders have been given the permit to extract timbers from their community forest timber which is the primary source of their livelihood has not been sustainable. Their livelihood which is depended upon that has been impacted at large. Their non-wood forest product livelihood has been impacted not only by the timber extractor from the outside but also the erratic rainfall which is a global problem and wild animal encroachment at night.

b) District: Haa

Sustainable developmental goal 6 Clean water and sanitation	
situation	✓ Water remains unavailable or scarcely available during the dry season. ✓ As toilet is not available in the highland open defecation is common.
challenges	✓ Erratic rain & snowfall accompanied by annual decrease in the water level in the lakes are a huge concern for the herders. ✓ Poor sanitation and vulnerability to new diseases is another concern for them. ✓ As most of the tourists opt for trekking managing waste becomes another challenge.
Importance in livelihood	As the material for the construction of toilet cannot be reached up in the highland due to the unavailability of farm road open defecation is very common. The good thing is that the people know all the good about having a toilet.

Sustainable developmental goal 7 Affordable and clean energy	
situation	✓ In the highland cow dung is used for domestic purpose due to the unavailability of fuel wood. ✓ In the lowland, fuel wood is not used as electricity and gas is available.
challenges	✓ As they are fully depended upon the use of cow dung the herder's fear of falling prey to deadly diseases that require major health care. ✓ Limited income generating opportunities stops them from switching to electricity and gas from cow dung. ✓ The huge terrain makes it difficult for them to transport LPGs.
Importance in livelihood	Not all parts of Haa districts is using electricity and gas for their domestic purpose. Even though energy is pivotal in livelihood enhancement still getting it to the highlanders of haa has been a challenge keeping in mind the geographic location accompanied by unprecedented wind storm.

Sustainable developmental goal 11 Sustainable cities and communities	
situation	✓ The traditional Bja weaving skills is fast disappearing. ✓ Presently only few families knows the Bja weaving skills which makes this product rare and very expensive. ✓ They expect support from the government in order for them to revive the skill.
challenges	✓ Yak herder population is shrinking as the younger generations prefer to live and work in the urban centers. ✓ Unavailability of modern technology at the high land discourages the youth to live there. ✓ Fear of herder's population disappearance is high.
Importance in livelihood	Bja weaving skill is the most importance livelihood for the highlanders and keeping it sustainable has become a challenge for their community members. They expect the government to provide support in order to revive the skills and keep it alive for the future generation and beyond.

Sustainable developmental goal 12 Responsible consumption and production	
situation	✓ Yaks are the main source of income generation for the highland livelihood. ✓ The highlanders are as well dependent upon purchased food for self-consumption by selling livestock products.
challenges	✓ Late snowfall ultimately leads to poor fodder growth and even the mortality rate of livestock increases. ✓ High risk of animal encroachment. ✓ Unprecedented weather followed by erratic rainfall makes it difficult for them to feed their animals.
Importance in livelihood	Basically here the livestock products gained using yak is the main source of income generation primarily to improve their livelihood but the unpredictable weather makes it difficult to main it as yak require grass to be fed.

Sustainable developmental goal 15 Life on land	
situation	✓ Even though the soil is fertile and crops grow really well but still only 70% can be harvested due to wild animal presence. ✓ Use of chemicals fertilizers to maintain good yield has been on the rise which is leading to high cost and low income scenario.
challenges	✓ Uncertain weather condition prevents growth of grass which is necessary to feed the animals. ✓ Wild animal encounter between human and bear increases risk. ✓ Unaware of crop diversifications system and various other modern methods. ✓ The farmers are lacking in terms of climate change knowledge.
Importance in livelihood	As their livelihood solely depends upon the product generated from yak, climate change plays a very important role in it. The problem caused by undefined weather condition is giving rise to grassland maintenance difficulty without which livestock product cannot happen.

c) District: Samtse

Sustainable developmental goal 6 Clean water and sanitation	
situation	✓ Only water from the stream is considered as clean to drink. ✓ Water gets dirty during the rainy season. ✓ Only 241 HH out of 296 HH have access to piped water connections. ✓ About 31 HH do not have access to proper toilet.
challenges	✓ Insufficient water during dry season is either delaying cultivation or making it difficult. ✓ Landslide completely dismantles water tanks and water pipes at all level. ✓ Change in rainfall pattern over the course of time. ✓ Repeated maintenance of damaged water tank and pipe line caused by landslide is increasing the cost. ✓ Too much dependency on rainfall arising from the drying water source.
Importance in livelihood	Though modern toilet and piped water connections has been found in almost every household still some household has complained of being cut off from piped water as they did not provide their help in the construction of water tank and distribution pipes. Their livelihood is fully depended upon the rainfall during the dry season.

Sustainable developmental goal 7 Affordable and clean energy	
situation	✓ Energy is primarily utilized for domestic purposes like cooking and lighting. ✓ Despite of availability of LPG and all still between 70 to 80 household use biogas for domestic purpose.
challenges	✓ Poor sanitation is pulling them back from using firewood for domestic purpose. ✓ Any possible accident arising from the use of firewood is a priority concern for the villagers. ✓ Using clean energy like LPG and electricity is hard option for them as they cannot afford for it.
Importance in livelihood	Both traditional as well as modern way of producing fire for the domestic purpose are applied for livelihood use but biogas use is the most preferred one as it is affordable as per their earning.

Sustainable developmental goal 11 Sustainable cities and communities	
situation	✓ Majority of community members live in shelters constructed using bamboo and wood.
challenges	✓ Available timber species are not considered suitable as a construction material. ✓ Distance of the timber locations makes it expensive and time consuming to transport it from one place to another.
Importance in livelihood	Their livelihood depends upon the locally available timbers but the distance causes issue in transporting it and also consumes a lot of valuable time and money. On the other hand lack of fund makes it difficult to be used for construction purposes.

Sustainable developmental goal 12 Responsible consumption and production	
situation	✓ Other than cereals and vegetables rest are sold for income generation. ✓ Most of the household has their own garden where they grow vegetable for own consumption. ✓ March month they face food shortages. ✓ During food shortage they make their purchase from neighboring town. ✓ Their consumption pattern has as well increased.
challenges	✓ The rising issue of crop pests and diseases has decreased their overall crop production. ✓ Among many other wild animals monkey add to 50% of total damages to crop. ✓ The most common and unstoppable problem is related to landslides which destroys the soil fertility.
Importance in livelihood	Food is the most essential means of livelihood survival and it becomes short during the month of march. Almost more than half of the people have their vegetables garden which is used for self-consumption.

Sustainable developmental goal 15 Life on land	
situation	✓ The quality of soil and land has decreased mainly due to flood. ✓ The aftermath of the flood was such that the growth of crops had seen a declined. ✓ Deforestation for the purpose of residential and government offices construction. ✓ Availability of traditional food in the forest has decreased.
challenges	✓ As crops are grown on steep areas they get washed away. ✓ Increasing number of modern day construction has put a pressure on the environment and its ecosystem. ✓ The high presence of wild animals put food security into grave danger.
Importance in livelihood	The community depends fully on the cultivation of crop to sustain their livelihood at all times and situation Man made problem such as deforestation and natural hazards such as flood has impacted the livelihood of almost all.

1.1.2 Conclusion

a) SDG 6: Clean water and sanitation:

Erratic rainfall caused by the unprecedented weather conditions has been reflected as the one of the most common problem in all the three districts as discussed above. Often these situation leads to water depletion problem. Sustaining water resources is a huge problem adding on to the distance of the source from the households. The government has taken many other steps in order to bend the problem of water scarcity which is not at all feasible both technically as well as financially. The people are well versed with the problem of water and they are as well trying their best to sustain it. Open defecation is less prevalent these days as even the village communities are aware of its health problems if not taken care of. Modern time flush toilet cannot be constructed in all rural locations considering the fact that if the water source of the place at a far distance and maintaining sanitation becomes a challenges as well as problem.

b) SDG 7: Affordable and clean energy:

Traditional biogas and firewood has been seen as the one of the most common and affordable source of energy utilized for domestic purpose. LPG is not being utilized by few margin of rural household as they are not able to afford it considering the income they make and the number of family members they have to look after. Even though electricity has been made accessible and affordable for all household in the rural region still than some fraction of household make their livelihood using the same old biogas and firewood. Use of firewood has been seen as the most common means for domestic use by the highlanders.

c) **SDG 11: Sustainable cities and communities:**

Deforestation and damage to the environment is the two most discussed problems under this sustainable development goal. Deforestation as we all know is known as the cutting down of trees for various reasons. And this has direct and immediate impact on the environment at large. The construction of government offices and other houses has led to deforestation reducing the sustainability goal of our country. Other major problem as cited under this SDG is the timber availability for mass group. After the government started giving away permits for the extraction of timber even for the outsiders the sustainability of the timber has seen a reduction owing to large scale extraction. The number of timber the village community used to extract has decreased as the outsiders take the maximum chunk. This has taken a toll on the overall sustainability of the timber in the country.

d) **SDG 12: Responsible consumption and production:**

The people are not responsible consumers and as well producers as they produce only for the purpose of self-consumption. As the highlanders of Haa earn less income by way of selling their livestock products they are not able to purchase modern day cooking methods such as LPG and kerosene. They are fully dependent upon the traditional method of biogas and firewood. For the rural community of Samtse as they are not able to cultivate enough crops due to the problem of insects and pests owing to erratic rainfall and flood they end up buying more from their neighboring town for self-consumption. Government support of such community is only limited to the extent of supplying seeds and farming equipment but not doing detailed research and development in order to learn the overall problem.

e) **SDG 15: Life on land:**

The community people are fully aware of the problem of deforestation, forest fires and landslides. They are even aware of crop damages caused by insecticides and pests and wild animal encroachment. The government has even tried and is still trying various measures to solve such problems, but since it is not man-made the immediate damage cannot be avoided. The only thing the government can do is to direct the concerned agency on notifying the general public on the potential of such problem and to mitigate it. And the community people can only grieve for the maximum affiliated impact.

2.1 Livelihood vulnerability, causes and policy assessment of Bhutan

The term “Vulnerability” as we know seems like a simple word with marginal value but when we do in-depth study on it the actual reality is that it is a vast term focused on a wide range of areas involving the adaptability and sensitivity of an individual or group towards it. Before when this term was less known and when there was not much of urbanization, vulnerability was a niche term relating to the exposure to risky situations. But now as it has become one of the most important and most researched topics. The definition of it has included the risk of getting socially, economically, physically and politically exposed to situations that can damage ones

livelihood. Livelihood vulnerability is a situation in which there is a high certainty of an individual or groups getting exposed to different unprecedented areas leading to short term or long term damage of livelihood.

The livelihood vulnerability assessment under this topic has been compiled based on the highest vulnerability of 12 different areas, causes of the problem and the policy and programs launched to provide guidance and support.

Children in conflict with law (CICL)	Causes	✓ Pressure from stronger individuals and groups. ✓ Dysfunctional families. ✓ Economically limited or scarce. ✓ Forced/encouraged by the adults to do a crime
	Vulnerability	✓ Feeling of loss of freedom to do things I wish to do. ✓ Filled with the fear of getting stigmatized by the society/community for the reason concerned. ✓ Lack of confidence about their future. ✓ Exposure to repeated physical and mental shocks. ✓ Child traffickers.
	Policy	✓ Child care and protection act of Bhutan ✓ National commission of women and child. ✓ Prison act of Bhutan.

Elderly in need of support	Causes	✓ Rural urban migration of the youth leaving their elderly parents. ✓ Elderly parents are abandoned by their grown up childrens who consider them as a burden. ✓ Some elderly parents don't want to old house and migrate to a town area and hence they are left out.
	Vulnerability	✓ Elderly living in the urban place with their childrens are kept within the four walls of their home during day time. ✓ Childrens don't give them proper medications for their age related problems. ✓ They are being mistreated if the daughter/son in law is not of good nature.
	Policy	✓ National pension scheme if the elder person has been an employee of a company. ✓ Draft national social protection policy which

		provides percent of income to support the elderly. ✓ Royal society for senior citizens which look after the elderly. ✓ Various other CSOs such as Tarayana foundation.
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Female workers of Drayangs	Causes	✓ They join drayangs as high pay is being offered. ✓ They lack proper education and the required skill to get enrolled in a well paid job. ✓ Some join as they consider that place as a platform to showcase their dancing and singing talent. ✓ Some of them consider it as a medium between them and film industry.
	Vulnerability	✓ Stigmatized by the society given the nature of the profession. ✓ Prone to sexual harassment in the case of the clients visiting the drayangs getting overly drunk. ✓ The worker gets exposed to various substances under the influence of the clients as well as their own co-workers. ✓ At risk of various health issues pertaining to loud music, odd working hours etc.
	Policy and program	✓ Any form of sexual work or promotion of prostitution has been considered as a criminal act under the penal code 2004. ✓ National commission for women and children. ✓ Labor and employment act. ✓ National youth policy act 2011 has considered female working in drayangs as a priority youth group.

Person using drugs & alcohol	Causes	✓ As the drugs were easily available beyond the border the use and sell of it became a practice among the youths. ✓ Acceptance of alcohol in the form of religious offering made in Bhutan encouraged the youth to gain the habit. ✓ Pressure from the adults, wanted to experience it lead the youths to use it.
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		✓ Youths considering this as a stress breaker and end up consuming it.
	Vulnerability	✓ Regular intake of it destroys the immune system of our body. ✓ The drug user might consume it again even after rehabilitation if he/she does not get the required moral support from her parents. ✓ User's cognitive skill starts depreciating.
	Policy	✓ Psychotropic substances and substance abuse act of Bhutan 2005. ✓ Bhutan Narcotic Control Agency. ✓ Increased price of alcohol to discourage it's consumption. ✓ Put an age limit (18 years & above)

Persons with disability	Causes	✓ Unhealthy diet by the mother during pregnancy. ✓ Consumption of alcohol/other substances during pregnancy. ✓ Exposure to unhealthy environment. ✓ Due to repetitive mental stress. ✓ Due to consumption of all kinds of drugs.
	Vulnerability	✓ Getting stigmatized by co-workers, friends, and neighbor and in some cases by relatives. ✓ Limited public facilities. ✓ Inability to communicate fluently puts them in grave risk of being physically and sexually abused. ✓ Problem getting employed due to their disability even when they full fill job criteria.
	Policy	✓ Special education and surgical camps. ✓ Disabled persons association of Bhutan (DPAB) ✓ Ability Bhutan Society (ABS) ✓ Bhutan foundation and draktsho vocational training centre. ✓ Provision of medical and vocational rehabilitation under disability prevention and rehabilitation program.

Orphans	Causes	✓ Unprecedented death of biological parents in accidents. ✓ Left away by parents as either one or both are not ready to become parents. ✓ Rejection pertaining to gender choice of child.
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		✓ Left away in the streets or at the door steps of orphanage as the parent are economically not sound.
	Vulnerability	✓ Problem in the cognitive skill development. ✓ Can develop unprecedented mood changes due to lack of required love and support. ✓ Forced to beg in the streets and indulge in sexual practice. ✓ Restricted towards right to education and proper health care. ✓ Exposed to child labor, social stigmatization and getting bullied by their peers.
	Policy	✓ Child Adoption Act (2012) ✓ National Commission for Women and Children ✓ Convention on the Elimination of all forms of Discrimination against Women ✓ Convention on the rights of the child.

Out of school children	Causes	✓ Inability of the parents to meet the cost of education. ✓ Parents in the rural areas pull out their childrens from school let them work with them in the field. ✓ Limited number of educational resources and experienced teachers in the rural areas discourages the students to opt out of school. ✓ Lack of interest in studies. ✓ Early pregnancy ✓ Addiction to substances.
	Vulnerability	✓ Difficulty in getting the required job. ✓ Either forming a hooligan or becoming part of it. ✓ Addiction to substances. ✓ Getting kicked out their home by parents. ✓ Exposure to the harsh environment.
	Policy	✓ School Admission policy 2014. ✓ Early childhood care development policy 2011. ✓ School discipline policy 2012. ✓ The draft national education policy 2011.

People living with HIV/AIDS	Causes	✓ According to study, certain groups such as truckers, arm force personnel and all who can possibly involve in unsafe sex practice are at risk of getting HIV/AIDS. ✓ Lack of complete and repetitive awareness
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		- about it put them at high risk. ✓ Genetically transferred from parents. ✓ Human to human transmission by blood especially in saloon or sharing of substances.
	Vulnerability	✓ Social stigmatization. ✓ Limited access to required health care due to shortage of well trained health professional. ✓ Getting fired from job. ✓ Restriction by various essentials shop keepers.
	Policy	✓ National HIV/AIDS and STD Control Program (NACP) ✓ 2nd & 3rd phase of national strategic plan for HIV/AIDS people. ✓ To raise awareness and motivate those groups of people who are involved in heterogeneous & homogenous sex relations to come forward for testing. ✓ Prevention of Mother to child transmission ✓ Voluntary counseling and testing. ✓ Early infant diagnoses

Single parents & their children	Causes	✓ Personality differences of either of the two partners. ✓ Opposite sex not accepting the child. ✓ Domestic violence arising out of alcohol consumption or sudden behavioral change. ✓ Unprotected sex ✓ Sudden demise of spouse.
	Vulnerability	✓ Single mother who were dependent upon her husband before finds it hard to make income for livelihood. ✓ Single working mother are at high risk of work place harassment. ✓ Not able to enroll children in school due to limited income. ✓ Social stigmatization. ✓ Chances of using drugs out of stress. ✓ Childrens brought up in such environment and deprived conditions are accustomed to committing crimes.
	Policy	✓ Child care and protection act of Bhutan 2011. ✓ Marriage act of Bhutan 2009. ✓ Civil society organization act.

		✓ Rural education foundation. ✓ Loden foundation.
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Unemployed youth	Causes	✓ Drop out of school. ✓ Not able to study further due to social & economic conditions within the family. ✓ Corruption and partiality in the organization applied. ✓ Unlimited number of graduates and limited number of jobs. ✓ Mismatch gap between job seekers choice of work and employers expectation. ✓ Indulging in substance use.
	Vulnerability	✓ Getting addicted to drugs. ✓ Depression resulting from worry about future. ✓ Society and relatives looking down on them as they have been unemployed for a longer duration. ✓ Forced to involve in the world of crime arising out of wanting to earn money for livelihood. ✓ Long term health related issues out of depression.
	Policy	✓ Economic development policy. ✓ Cottage, small and medium industry policy. ✓ National employment policy. ✓ National human resource policy. ✓ Technical vocational educational and training. ✓ Ministry of labour and human resource ✓ Build Bhutan project.

Victims of domestic violence	Causes	✓ Gender stereotypes of women role's subject to being a housewife looking after husband and children sometimes put them into the hands of an abusive life partner. ✓ Women's dependence on their husband for
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		social and economic support puts them at a harm's way. ✓ Social stigmatization and negative suggestions to the divorced women's to get married again lands them a ruthless partner. ✓ Single mother getting married again lands their as well as their children into the hands of a violent partner. ✓ Man under the long term influence of alcohol ends up abusing their partner and children.
	Vulnerability	✓ Women who face domestic violence can suffer from depression which will ultimately lead them to a long term health issues like mental trauma, permanent psychological trauma etc. ✓ STDs transmitted from their partner. ✓ Miscarriage ✓ Abusive situation at home may lead to decreased performance at their workplace.
	Policy	✓ Domestic violence prevention act 2013. ✓ National commission of women and children. ✓ Women and child protection division

Vulnerable urban dwellers	Causes	✓ Rural to urban migration of the youth for job. ✓ Lack of affordable house forces them to settle in an inappropriate and vulnerable house at the outskirts.
	Vulnerability	✓ At risk of natural & man made hazard like wind storm, heavy rain, fire etc. ✓ Exposed to eviction from shelter due to the absence of legal entitlement. ✓ As the crime happens in and around those areas the risk of getting exposed is very high. ✓ Enjoy limited access to healthcare.
	Policy	✓ National urban development strategy (NUDS) ✓ Ministry of work and human settlement (MoWHS) ✓ National housing development corporation (NHDC) ✓ Department of human settlement (DHS)

(Information source: Bhutan vulnerability baseline assessment 2016 (UNDP))

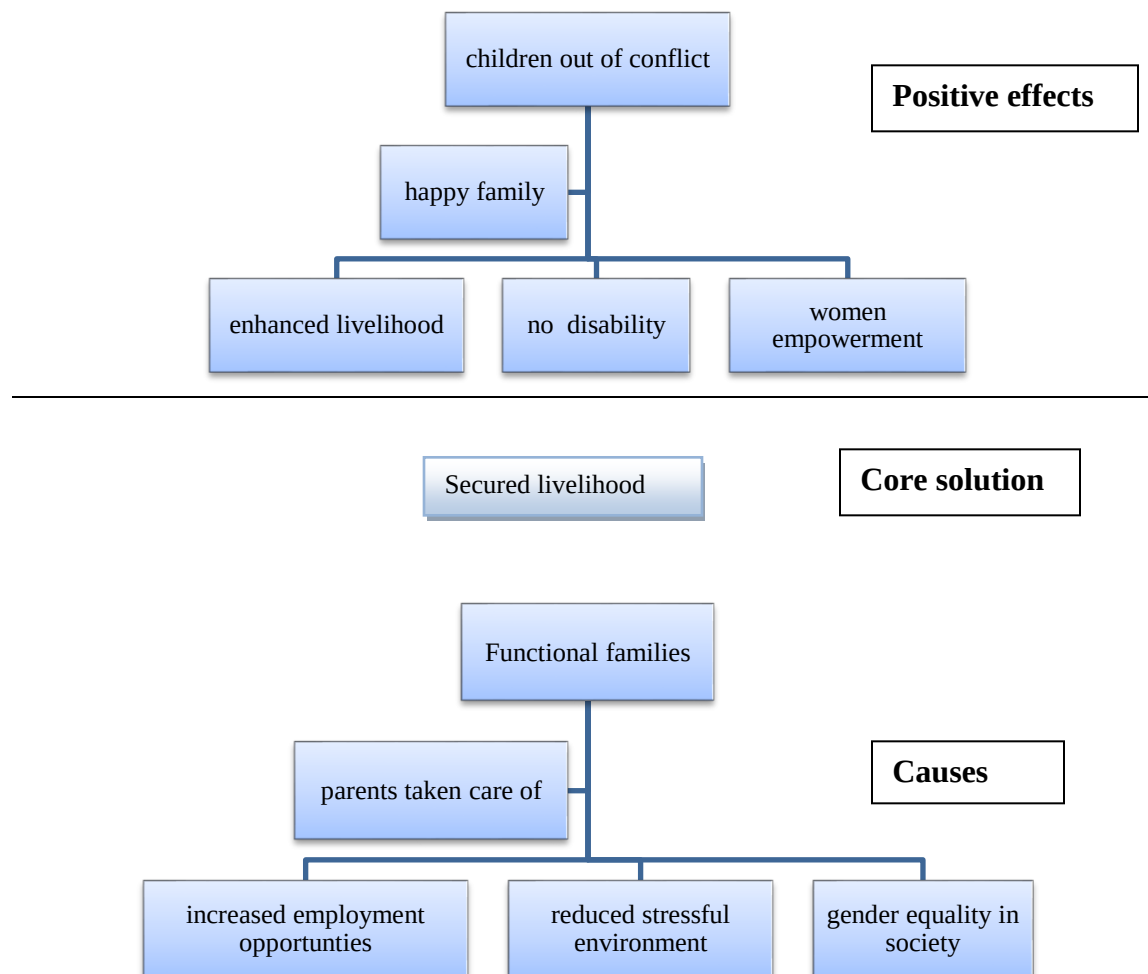
As mentioned above the research paper has discussed on the various causes of livelihood vulnerability in Bhutan which is still prevalent despite of the efforts to reduce the maximum damage. Many policies has been framed to minimize the overall risk by drawing penalty and related punishment in case of disobedience of the policy.

Problem tree analysis

Causes: When a child is born to a dysfunctional family it leads to him/her being abandoned indirectly leading to various permanent mental stress getting stigmatized for so many reasons.

Negative effects: The effect of it being that the children getting involved in crime activities, suffering from mental as well as physical disabilities and even domestic violence.

Objective tree analysis



Causes: The gift of being born in a functional family is that you are taken care in the right way leading to increased employment in near future, absolutely less to zero stressful environment and learning the right thing about gender.

Core solution: The reason for it is pertaining to secured livelihood.

Positive effects: In this way the child(ren) won't be part of a conflict environment and when this happens their livelihood would be enhanced, zero disability and if it is a women they get empowered.

3.1 Vulnerability reduction activities implemented over the course of time

The livelihood vulnerability reduction activities and programmes in this work is affiliated with Tarayana foundation center of Bhutan. Unlike other civil society organizations, Tarayana foundation's livelihood activities are focused equally both man and women. Their social development programmes are mainly focused on removing all the risks and vulnerabilities areas

in the rural communities of Bhutan and bless them with sustainable livelihood. Their livelihood vulnerability activities and programmes are focused on diversified areas.

3.1.1 Surgical camps:

This as one of the various livelihood activities focused on doing surgery of those with disability and deformity in Bhutan. The campaign was started on the year 2006 with the primary motive to eliminate any form of facial deformities. Under this initiative as many as 252 individuals with facial deformity had received necessary treatments are now able to lead their life with utmost satisfaction and confidence. This mass programme was initiated jointly by the Ministry of health by inviting surgeon from Singapore. This particular programme was conducted in the year 2019 for the third time.

From many successful surgery stories this research will reflect on one of the story of a four year old boy from the western region by the name Wangchuk who had undergone facial deformity surgery during the surgical camp.



(Picture source: Tarayana foundation annual report 2019, Bhutan)

Wangchuk is a four year old boy from western Bhutan (Wangdue Phodrang). He had a facial deformity problem even before he was this age. His parents were really worried about his problem and did not have any idea on the solution. They thought if this problem is left untreated then in future he might not grow like other childrens and on the other hand his friends might stigmatize his deformity. They were worried about him to suffer from malnourish due to improper intake of food. He visited hospital with the same problem when the surgical camp was held in the year 2016 for which he had done surgery of his cleft lip and palate. He again visited hospital at a different district for a follow up in the year 2017. Presently he is able to speak well enough and in future he might well be able to speak more clearly.

3.1.2 Annual pilgrimage:

There are a lot of senior citizens in Bhutan who all wish to travel to a holy place for mind enlightenment but are not able to visit as they are limited to the monetary requirement to travel there and the various travel documentation and formalities. Keeping this in mind Tarayana foundation had taken a step forward by starting this initiative of annual pilgrimage programme in the year 2008 two years after the surgical camp to help those group of senior citizen who wish to

travel to a religious place like bodhgaya but are not able go pertaining to various reasons cited above. This annual pilgrimage programme undertaken every year.



(Picture source: Tarayana foundation annual report 2019, Bhutan)

Eight senior citizens got the opportunity to visit holy places like bodhgaya and Varanasi in the 2019 who were accompanied by their foundation staff. A total of 100 senior citizens were taken for pilgrimage visit which was funded by various stakeholders and supporters.

3.1.3 Food & nutrition:

- ✓ South Asia food and nutrition security initiative.
- ✓ Capacity development and communication for improved nutrition outcome in rural households.

The above were the two different programmes conducted by Tarayana foundation with support from the world banks which focused on providing right dietary for the rural household with their priority focus on the health and nutrition of pregnant and lactating women in the rural areas. Their task under that also includes sending health professionals such as nurse women to help the pregnant and lactating women. As part of the above initiative they as well addressed the global issue of malnutrition as a part of the 1000 day window of opportunity.



(Picture source: Tarayana foundation annual report 2019,Bhutan)

As an enhanced step forward with support from the UNICEF they launched a project titled “Integrated Health Promotion Programme (IHPP)” which not only involved external supporters but also internal supporters along with the participation of the community. This programme included every health concerns, expertise and solutions. It was launched for a wider scale considering how complex is the health institution.

3.1.4 Adaptive and mitigation measures towards climate change:

Climate change has not only increased the livelihood vulnerability areas in the rural communities but also stretched the thinking ability to come up with various diversified adaptive and mitigation intervention. The variation in the climate change has increased the risk of landslides in the rural sloppy regions and massive flood in the plain. With the required support of fund from “Bhutan trust fund for environmental conservation”, Tarayana foundation has come up with the initiative of “Developing climate resilient communities by way of adaptive measures and mitigation intervention”. This initiative was implemented on 18 villages of five districts which are as mentioned below.

Dzongkhag	Interventions
Haa	1 reservoir tank with 4 pressure breaker constructed for a total of 81 hh.
Sarpang	1 reservoir tank, 1 syntax tank, 2 pressure breaker and 6 km electric fencing has been installed for 17 hh.
Lhuntse	34 km electric fencing done for 143 hh.
Mongar	71 km electric fencing and 1 reservoir tank done for 180 hh.
Samtse	11 km electric fencing, 3 reservoir tank, 8 pressure breaker and 5 water user groups formed.

3.1.5 Housing renovation programme:

This particular programme has been Tarayana foundations main activity under the section livelihood vulnerability reduction which builds new and improved houses for rural communities who are exposed to external hazards. They provide new houses with proper modern toilet, renovate the old houses as per their preferences, take care of hygiene and sanitation, repair home in case they want to live in the same house.



(Picture source: Tarayana foundation annual report 2019, Bhutan)

Both the houses above are from different districts of Bhutan. The houses were constructed under the initiative of Tarayana foundation with joint support from American Himalayan foundation. The household of both the newly constructed houses now enjoys a better livelihood with proper toilet to maintain hygiene and sanitation, and stable roofing to protect them from unprecedented heavy rain and storm. They are also experiencing an enhanced lifestyle.

The new and improved houses of both the household are different as seen in the picture above. Some household are having two floored houses where some are having only one floor. The houses also differ in terms of shape and size. The reason is because the houses were constructed or even renovated based upon the following:

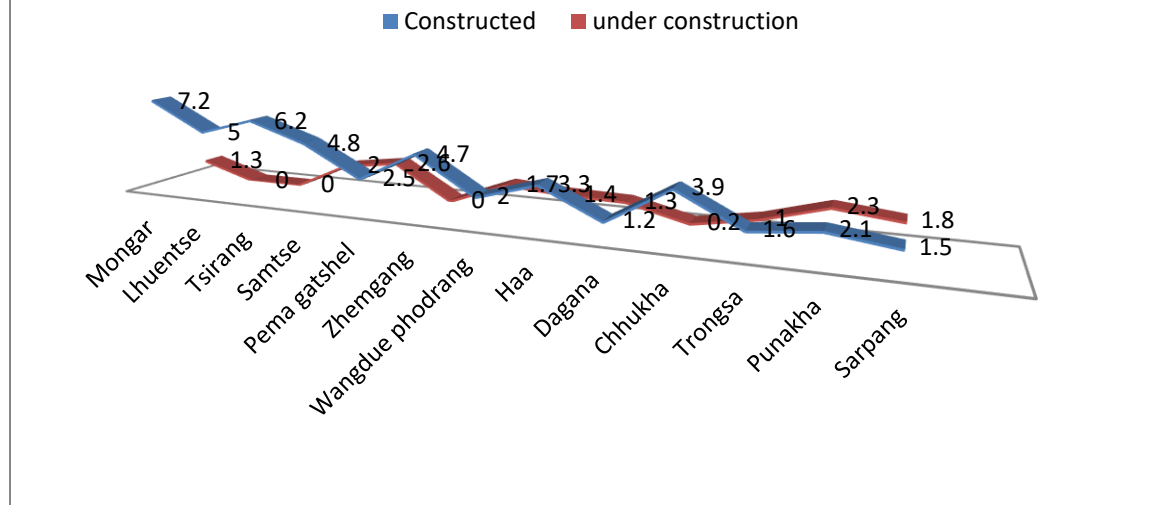
- ✓ Location
- ✓ Climatic conditions.

- ✓ Type of environment.
- ✓ Raw material availability
- ✓ In accordance with their tradition
- ✓ Some household prefer double floored houses and they provide some percent of money from their pocket.

Below is report of houses constructed in different parts of Bhutan by Tarayana foundation center with joint from external stakeholders under the initiative, "Integrated Community Development for Poverty Reduction".

No. of houses/toilets constructed.	location of the houses constructed.	Supporting stakeholder name.
371	Trongsa, Wangdue Phodrang, Punakha, Haa, Tsirang, Dagana, Chhukha, Lhuentse, Zhemgang, Sarpang, Samtse, Mongar & Pema gatshel.	American Himalayan Foundation.
35	Dechen pelri, Sarpang	Young president organization (YPO) sea dragon, YPO Malaysia, YPO ASEAN united.
53	Gangzur gewog & Lhuentse	Love peace & harmony foundation.
2	Dagana	GEF small grant programme, United nations development fund.
35	Chapganpa, Waamphu, Kamati, Kamalung, Dalibe, Ongkhar, Kanmulung, Remadu, Tong and Gangder villages.	Thai philanthropists
371 (flush toilets)	Lhuentse, Samtse, Zhemgang, Sarpang, Pema gatshel, Dagana, Haa, Punakha, Wangdue Phodrang and Tsirang	American Himalayan foundation
7 (flush toilet)	Dagana	GEF small grants programme, UNDP.

Line chart of housing improved under the support of American Himayan Foundation



(Information source: Tarayana foundation annual report 2019, Bhutan)

Note: The original chart was in column form and the numbering system was marked using real numbers.

The line chart above reflects on one of the intervention of Tarayana foundation which shows the houses which got renovated and which are still under renovation in 13 districts. The blue line indicates the constructed houses with the maximum houses completed in Mongar (7.2%) and least in Sarpang (1.5%). Red line indicates houses under construction with Mongar (1.3%) and Sarpang (1.8%).

1.1 Self help groups (SHGs) of Bhutan

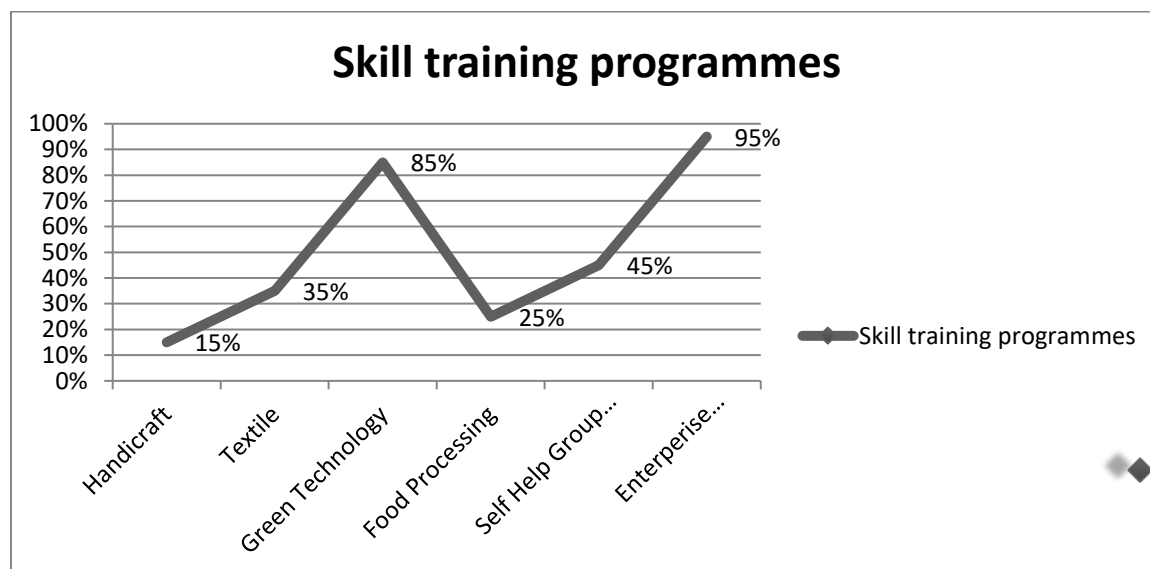
Self help groups widely known as a group of individuals mostly women who work towards self-reliance with the intention to provide for themselves and their community members by way of undertaking variety of income generating activities. They are bagged by various civil society organizations with the goal to encourage a sense of working as one family for common income generation for their community. In order to further enhance and encourage the current self help groups and also to take in new members, many communities facility centers has been established in different parts of selected dzongkhags.

Unlike in other countries especially India, Bhutan has formed 200 self help groups comprising of both male as well as women members in the selected dzongkhags. There has not been any issue from male inclusion as a self help group member. They are being provided with the required fund for their business plan, raw material & training for handmade product development. The self help groups of Bhutan get micro credit directly from the concerned CSO. The self help

group members participate in activities that require them to make handmade products using raw material such as bamboo, cane, nettle, wood, food processing, making traditional paper, beekeeping, dairy farming, artificial mushroom cultivation method, etc.

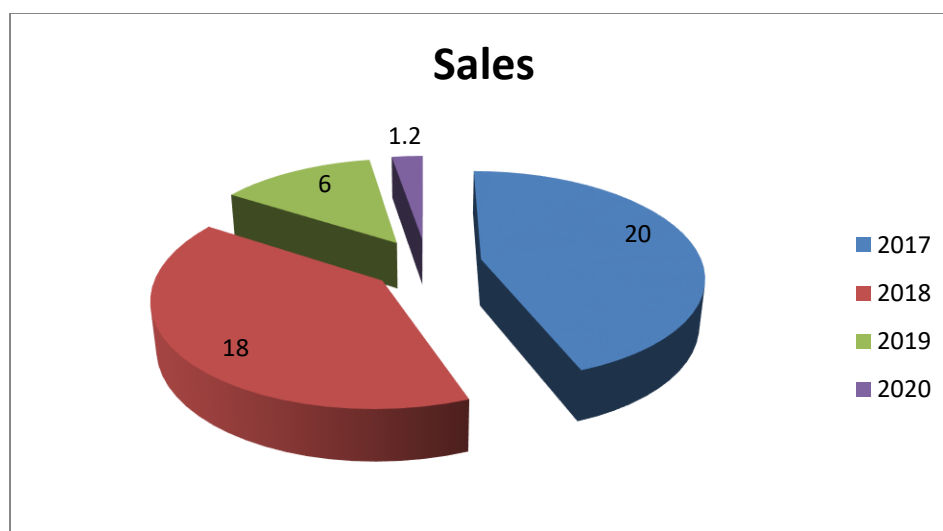
1.1.1 Skill training

Different civil society organization in Bhutan has a different skill training to offer depending upon the concept of women empowerment and the common objective of livelihood vulnerability reduction to remove gender inequality.



The line graph of the various skill training programme provided by Tarayana foundation center. Percentage has been used show the data.

The diagram above puts a light on the different skill training programmes provided in Bhutan by Tarayana foundation so far. As per the diagram there are six skill trainings with handicraft (15%) training provided and Enterprise (95%). Even skill based training on green technology is at 85%.



The pie chart below reflects on the diversified skill training programme from the year 2017 till 2020.

As mentioned above the numbers on the pie represents the number of different holistic skill and training programme provided to the self help groups keeping in mind the availability of raw material and the skill which they already possess. The different color on the pie represents the years they programme had been provided. As per the diagram during the year 2017, (2.8/4) 20 skill based training had been provided and due to the pandemic only (0.06/4) 1.2 has been trained in the year 2020.

1.1.2 Market facilitation

In order to let the buyer see and know about the different handmade products of the Bhutanese rural artisans, various civil society organizations made it available by way of market facilitation. They follow this way mainly to market the handmade products.

Mentioned below is the market facilitation of Tarayana foundation from the year 2017 – 2020.

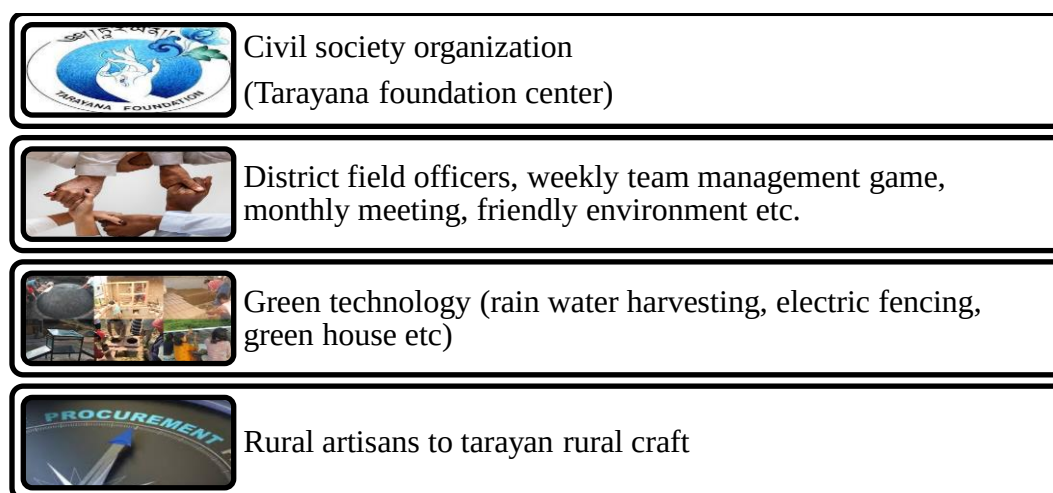
Year	Name of event	Region
2017	Tarayana annual fair	Thimphu
	Tarayana programme exhibition	Mongar
	Summer festival	Haa
2018	Tarayana annual fair	Thimphu
	Summer festival	Haa
	Tshechu	Paro
	Bhutan week	New delhi (India)
	SAARC chamber women entrepreneur council	New delhi (India)
	Development dialogue & exhibition of Tarayana women entrepreneur product	Bangalore (India)
2019	Tarayana annual fair	Thimphu

2020	Tarayana's programme exhibition	Mongar
	Summer festival	Haa
	Foothill festival	Sarpang
	In house exhibition	Thimphu

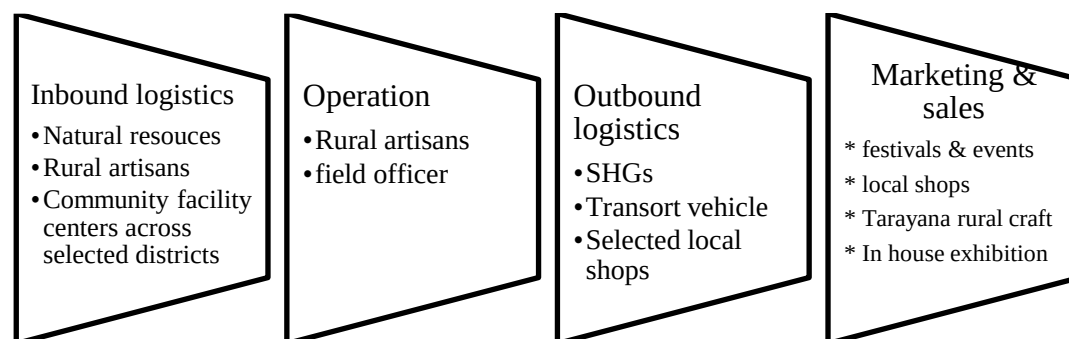
Tarayana foundation delivers the handmade products of its rural artisans through various national and international events and festivals every year. Since the outbreak of the virus such events could be organized in an open environment. In order to continue with the their annual showcase of rural crafts and keep the skill of the rural artisans a life, Tarayana foundation center organizes it in their hall in the form of in house exhibition.

1.1.3 Value chain analysis

Support activities



Primary activities



Under its support activities Tarayana foundation center a registered civil society organization comprises of human resource management for which there are close to 10 field officers in the selected districts who look after the problems related to household and individual livelihood. At their head office they involve in a weekly activity with the core objective of building a better

team. They as well held monthly meeting to discuss the health of their programmes and the way forward. In order to support and let the rural people embrace the affordability of livelihood they introduce green technology to them and deliver it till their door step for sustainability and self-reliance. They have got company vehicle which has the responsibility of the procurement of the crafts from the place of origin to their center for marketing & sales. At the end of the rural product development, they make sure it is being delivered to the valued customers through local, national and international level festivals and events.

As a part of their primary activities, their inbound logistics consist of mostly natural resources and also those things that can be recycled. They have got their rural artisans across selected districts that all are equipped with the required skill and training to develop a product. Their operational system is very simple which comprises of rural artisans and field officers who communicate with them. Under outbound logistics they have around 200 SHGs in various selected districts equipped with the required skills and they hand their finished products to the field officer who makes sure it gets delivered to the respected shops and Tarayana rural craft center.

2.1 Self help group as a politically blinded and socially binded tool

In other countries where self help group are prevalent in very high number the political intervention are as well very high as these groups are being used for their benefit. There are few cases where even the person leading the self help group become part of a political campaign or even the party itself. Over the course of time self help group has turned from being a social phenomenon to a profit making group. In Bhutan as far as the information gathered is concerned there is no self help group involvement in any form of political activity or campaign. As the SHGs are fully funded by the respective CSOs at times of need and come out from a vulnerable situation they don't have to worry about their products, business and livelihood collapsing.

There are field officers at their respective districts who look after their problem affiliated to their livelihood vulnerability and provide necessary support and guidance. There are 200 self help groups of Tarayana foundation consisting of 3000 members in total. The rural communities are being given awareness on the concept of self help group and it can act as a livelihood plus factor in case they decide to welcome it in their community and be participating in it.

2.1.1 Self help group formation procedure

The formation of self help group in Bhutan is not much of a rocket science as it is same as in India or any other country but the number of members in a group might differ. Both men and women are being selected as a SHG member and provided with equitable support and guidance. 20 participants are being selected as a self help group from the respective districts depending upon the livelihood vulnerability.

Step

- 1) Awareness campaign on the self help group concept to the village community members.
- 2) 20 participants consisting of both male & female are being selected depending upon their livelihood situation.
- 3) Those participants are provided with skill training on various activities as per the availability of the resource in their region.
- 4) They start developing the product and deliver it for marketing and sales.

3.1 Livelihood recovery option

In order to bring the livelihood of the rural community out from absolute vulnerability there is an internationally categorized worldwide strategy called the livelihood recovery option which comprises of three other options such as livelihood provision, livelihood protection and livelihood promotion. This option acts as a catalyst to recover and sustain the livelihood of the affected household. Livelihood provision has a set of interventions that mainly helps in sustaining the livelihood of the community by maintaining required nutritional level and saving lives. Livelihood protection is a set of interventions that primarily focuses on the measures to safeguard their household assets from unprecedented vulnerabilities. And finally livelihood promotion is a set of interventions focused completely on how to development a livelihood and sustain it for the future generations.

Bhutan being a small Himalayan country has been exposed to many vulnerable situation caused by the ongoing climatic conditions and these conditions give to the problem of drought and flood and other unprecedented calamities. When there is a situation of reduced water supply due to the climatic condition the small holder farmer's livelihood remain in a vulnerability stand as water which is the most important thing for their livelihood enhancement gets hampered badly. Without proper water supply the crop production cannot go on a full swing. Decreased water supply will reduce the nutrition level in the soil and deteriorate the water quality.

3.1.1 Livelihood provision

1. Micro credit: There are 18 civil society organizations in the country out of which about 8 of them have livelihood as their focus point. In order to provide for the upliftment of the household needs and wants, provision of interventions such as micro credit services, micro enterprises and skill based training. A micro credit service is a small loan provided to the rural household which is to be utilized only for the upliftment of their livelihood.
2. Micro enterprise: This includes the construction of a small shop for a group of self help group members along with micro credit service to boost their livelihood. The provision differs from one CSO to another.
3. Skill training: The most common provision by all CSOs in and around the world is providing different skill development training on various plat form. This skill enables them to have their own start up and enhance their livelihood.

3.1.2 Livelihood protection

1. Policies: In order to safeguard the livelihood of the marginalized groups the government has set various policies mainly for the protection of those people. These policies act as a wall between those in high vulnerability environment/situation and those leading to the livelihood vulnerability.
2. Housing improvement: This is one of the protection interventions by Tarayana foundation center under which the CSO renovate the same old house or construct a new one. The types of houses are constructed/renovated depending upon the culture and tradition of the place or the weather condition or the location. If the household wants to contribute a little amount from their pocket than such thing is also considered and used for construction.

3.1.3 Livelihood promotion

2. Crafts promotion: Different grand festivals and events held across Bhutan are being identified and for the promotion of handmade crafts by the self help group.

4.1 National Adaptation Program of Action

Bhutan is a landlocked country situated on the Himalayan region with Nepal and other Himalayan regions of India. Being a Himalayan nation it is also challenged with other livelihood vulnerability conditions especially the prevalent global climatic conditions. With the best intention to either eliminate or reduce the maximum future impact this national adaptation program of action was launched with the intention to create a sense of adaptability of the vulnerable people to such climatic exposures. This program reflects on a wide variety of high vulnerability areas, its immediate damages and the adaptive government policies and projects pertaining to it for the good of the livelihood.

In order to minimize the overall vulnerability of the climatic conditions on the livelihood of the living in the high risk regions, the national adaptation program of action has identified few livelihood vulnerability areas that can be caused by the immediate climatic condition:

1. Forestry and biodiversity:
✓ The various vulnerability areas such as the floods, droughts caused by the variation in the climatic conditions can damage the agricultural land of the rural livelihood. The repeated and unprecedented lightening can cause forest fire which is an ongoing problem in the country despite of repeated advice and warnings.
✓ Impact of the variation in the climatic conditions can also been seen in the disappearance of the rare endemic plants and scare animals in many parts of the world and that includes

Bhutan as well. The birds that used to fly from Tibet towards Bhutan as a part of their seasonal migration has decreased due to the prevailing climate related conditions. Lots of plants are dying due to the absence of proper nutrition in the soil.

- ✓ The migration of the wild animals to a different region due to the frequent forest fire is leading to the loss of forest ecosystem.

2. Agriculture:

- ✓ The problem of global climatic conditions can lead to erratic rainfall which could eventually hamper the nutritional need of the soil and reduce its quality. The decrease in the rainfall pattern can lead to the disappearance of the variety of crop species and irregular water supply for the crop production.
- ✓ When the crops don't get the required amount of water and sunlight than it opens up a gate for the outbreak of pests and other diseases.

3. Natural disaster and infrastructure:

- ✓ One of the major livelihood vulnerable conditions triggered by the problem of global warming is the unprecedented explosion of the glacier lakes. The annual rise in temperature causes the glaciers to meltdown at a faster rate ultimately leading to explosion of the lakes up in highlands of Bhutan. This explosion when flows down in the form of drought will affect the infrastructure such as hydro power, agricultural land, human settlements.

4. Water and energy

- ✓ In order for the hydro power to generate electricity it requires an optimum speed and amount of water. If there is reduced water flow from the source than it could very well lead to reduced electricity production eventually the export rate to India would also decrease. Hydro power is the main income generation for Bhutan and is the livelihood of most people.
- ✓ The variation in the water flow into the paddy field will also lead to the reduced soil nutrition and quality.
- ✓ If the catchment areas are not able to store enough amount of water in it than it would lead to the deterioration of the environment.

5. Human health:

- ✓ The flash flood will lead to the loss of human life if not prepared.
- ✓ The reduction in the quality of water could give rise to various water borne diseases.

The national adaptation program of action process involved 55 projects out of which around 22 of them were selected for further examination. In a final step, 9 projects were selected to implement the program.

Enhancing sustainability and climate resilience of forest and agricultural landscape and community livelihoods in Bhutan project (2017 – 23)

This far sighted project was to go on till the year 2023 through enhancing the sustainability activities building towards a climate resilience of forest, agricultural landscape and community livelihood. The project takes a dip into the concern of climate change that has been affecting the lives of many especially on the rural livelihood security and poverty. Bhutan's rural livelihood is completely depended upon agriculture and about 58% of the populations are involved in agriculture sector for their living. As a major portion of the population is involved in agricultural sector the livelihood vulnerability caused by climate change is a high chance in those regions.

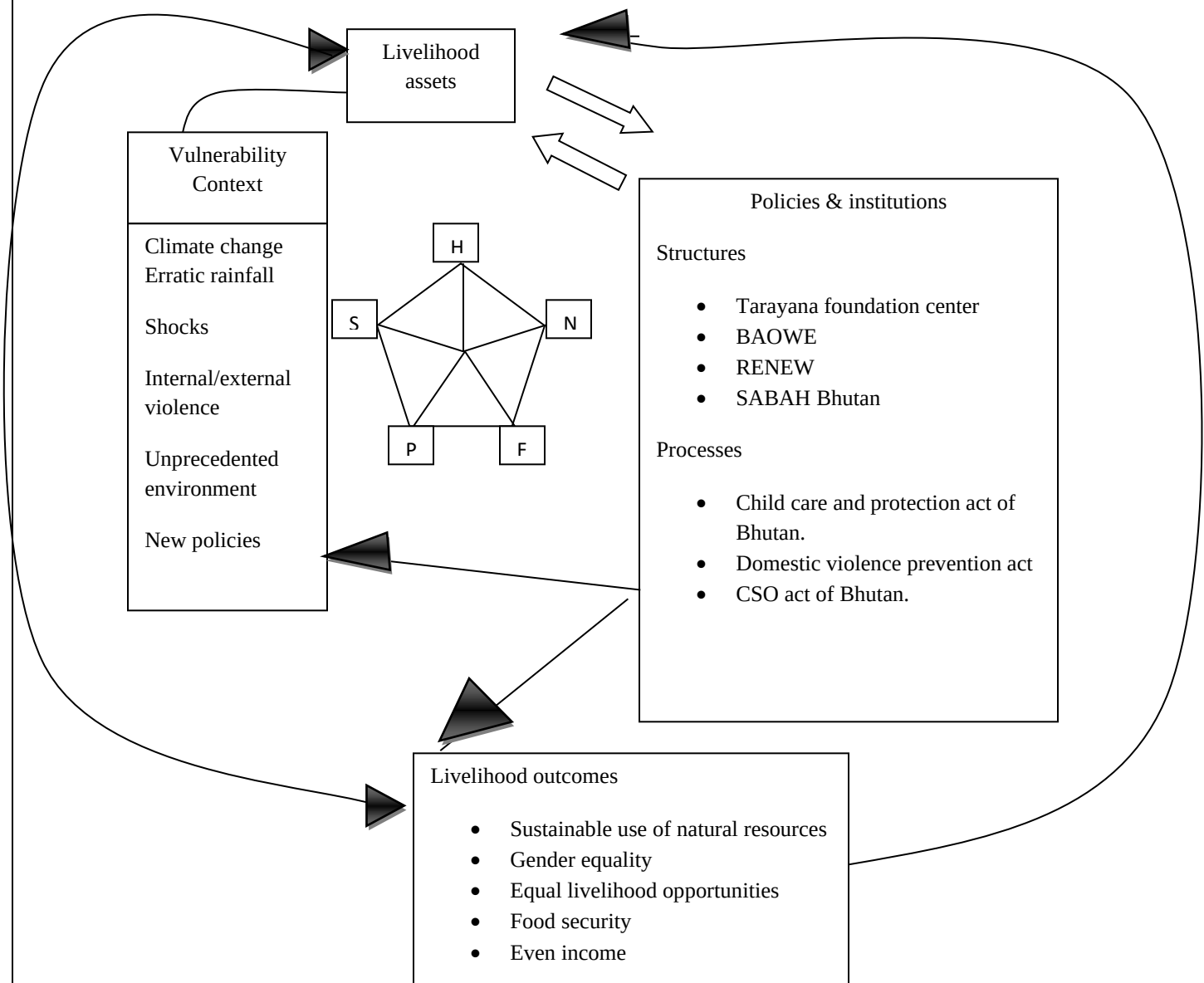
Crop yield is getting affected at large and there is no turning back to it considering the fact that the climate change is an uncontrollable phenomenon. The livelihood across Bhutan is being hampered with the maximum impact on the rural community who are the most vulnerable ones. The destruction caused by the climate change is putting pressure on the environmental ecosystem of Bhutan. Mis-management of it could very well have an absolute impact on the livelihood of the rural community as their vulnerabilities towards it increases.

This project expects to increase the resilience of the rural community by enhancing the sustainability the environment and promoting climate resilient livelihood. It also aims to build a system that would provide the required knowledge pertaining to the climate change and sustainability of the forest and agriculture landscape. But followed by every project expectation there are few or more project obstacles that cause it to slow down:

Barriers to the project expectation:

- 1) There is limited institutional support for the project due to which the expectation is far from reach.
- 2) The lack of institutional guidance restricts the project making its operational activities function properly.
- 3) Limitation on awareness with regard to the degradations of the sustainable environment prevents the projects overall expected outcome.
- 4) Limited information on the natural resource availability and resilient livelihood options blocks the way forward.

5.1 Sustainable livelihood development programme



This framework is an integrated form of approach where individuals and groups from different institutions come together with a common objective, to estimate the scope of a livelihood activity and prioritizing which livelihood related development activity to go about.

It seeks to eliminate various vulnerability areas that act as an obstacle between the marginalized people and the type of livelihood they see. It sets to achieve livelihood affiliated outcomes for enhancement of those delicate livelihoods especially of the most cornered individuals and groups.

It makes us re-imagine how the poor, weaker and the most marginalized section of people enjoys their livelihood and also how the policies and various institutions aid in the livelihood enhancement. It makes sure that whenever a livelihood activity is being developed it fulfills certain standards such as; it should be for the people, it should have the participation of the people, every developmental activity should be set at a multi-level, there should a support from both the government as well as private entities and finally the most important of all, it should be based on sustainability.

a) Capital assets:

Human capital: Trained rural artisans, field officers, livelihood experts, health consultants.

Physical capital: Renovated/newly constructed houses, modern day toilets for the community, rainwater harvesting system, solar panel.

Social capital: Connections with donors and funding agencies from inside as well as outside the organization.

Natural capital: Natural resources (availability of water, forest raw material), aquatic resources.

Financial capital: incomes (donations, project fund, income from interest etc.), expenses (programme expenses, administration overheads)

b) Vulnerability context:

Vulnerability is the feeling of uneasiness in the minds of those whose lives are like at the edge of a cliff. Just in the same way, the various vulnerability in Bhutan are pointing towards climate change which has dried up the water source due to which to water for agriculture is hardly available. The seasonal variation in the weather has caused erratic rainfall due to which growing crops as per its seasonal requirement cannot be achieved like before. Various other shocks such as earthquake, drought and heavy rainfall has caused unprecedented damage to the livelihood of many especially in the rural community.

c) Policies & institutions

Just like many policies and institutions that has been put in for the livelihood enhancement of the people in and around the world in the form of proper structures and uniform processes same like this in Bhutan also there are many structures and processes that safe guard the livelihood of the people in Bhutan despite of their status. Some of the structures give more attention to livelihood whereas others work towards women empowerment.

Structure like Tarayana foundation center work includes those activities which are livelihood enhancement oriented and not gender perspective. There are other structures like RENEW (respect, educate, nurture, empower women), BAOWE (Bhutan association of women entrepreneur) SABAH Bhutan which focuses on women as the prime subject through which they try to eliminate any sort of vulnerabilities from their lives and improve their livelihood.

d) Livelihood outcomes

After the integration of all the structures, processes, capital assets in order to eliminate the unprecedented vulnerability context there are outcomes which can be constantly achieved. The most important outcomes as the sustainable livelihood development framework are sustainable use of natural resources as these are the ones used frequently by the locals as well as the outsiders causing it to depreciate earlier than marked. Gender equality to remove any sort of biasness in the society. Provide equal livelihood opportunity to all despite of their status. The provision of food security for all regardless of how far and isolated their community is. And equal incomes mainly to narrow the gap between them.

CHAPTER 6

6.1 Success stories of the beneficiaries

There are millions of stories revolving in and around the world which has proven successful as well as unsuccessful depending upon situation and resource. The research will talk about few successful stories of Bhutan under various livelihood enhancement project initiated by Tarayana foundation center. Different successful stories has different skill and occupation to talk about, but at the end it is all about livelihood enhancement.

6.1.1 Story 1: Using trash for a livelihood start up

Ugyen choden now a mother, wife and a housewife. Her livelihood story all started from Trashigang her birth place which is at the north east till the capital city Thimphu in Bhutan when she started living up to her expectation. Back then she was a school student studying in the 7th standard, but due to the financial instability within the family she had no choice than to opt out of school and live a domesticated life. She got married at early age of 17 and gave birth to baby girl at a very tender age of 20. During her school days her dream was of becoming a teacher.

When she began to see her life in a dimmer way then out of nowhere she saw a ray of hope that came into her life in the form of Tarayana foundation's waste management programme. Through this programme she expected to have a bright and foreseeable future with her life opening doors to new windows. As expected she received the required training on it and started making a livelihood from it.

She not only gained enough knowledge on waste management but also started generating income for a better and improved livelihood. She feels that the programme has not only increased her self-confidence but also taught her to view life in two perspective.

6.1.2 Story 2: Crafters culture as their way of livelihood

Dorji khandu from khengkhar gewog under Mongar dzongkhag made a living by doing vegetable farming when his actual skill was related to wood crafting which was also the gewog's culture. According to his story, before he and few others used to make a living out of wood crafting. But now they don't due to the issue to not being able to get enough wood from the forest as it has been restricted by the concerned agencies and also on the other hand there was no marketing hub for promoting wood crafted products to the buyers.

When the hope of light was diminishing and everyone concentrating on other means of livelihood, Tarayana foundations marketing project held at the gewog was like a ray of hope for people like Mr. Dorji khandu and others. After that a field officer from the same organization formed a group of self help group comprising of 11 members dealing with different wood works. He along with other artisans got the platform to showcase their culture and skill to the outsiders and eventually were not only able to enhance their livelihood but also pay extra wages to the helpers.

All of these opportunity and exposure made them realize their dream and also live up to their expectation. They were very much thankful to Tarayana foundation as they were able to revive their original skill up to its glory and showcase their culture and the talent of their artisans.

6.1.3 Story 3: Open to closed defecation in khempa

Before the construction of modern day flush toilet, the small village of khempa under Samtse dzongkhags with a household number of 34 and a total population of 186 were following the age old way of doing toilet in the open ground also known as open defecation. The problem of open defecation in Bhutan is no different from other countries as the females and childrens are the one who face the most problem because of it and are vulnerable to various unprecedented situations and chronic diseases.

The people of that place was suffering from chronic diseases like diarrhea, hepatitis etc which was most repetitive among the childrens and aged people. Despite of the managements best effort to curb this issue still the male were not willing to accept modern day toilet as they did not feel like having it. When the women were approached for it they gave a lot of insight into their personal hygiene problems due to open defecations. It took a lot of efforts to build the modern flush toilets in that village as they had to change the mindset of the people of that village.

Today all households have modern day flush toilet. The female don't have to wait till dawn to do toilet outside any more. A 15 years old female recalls her times when she had to wake her sister up to go outside to do toilet. Now she is glad that she won't have to wake her sister up and go outside at night to do toilet.

6.1.4 Story 4: The grass hopper man with a lesson learned

Ata Zhangba a villager from Rukha also known as the grass hopper man who was also a father of three was always playing his musical instrument like guiter, roaming around the village drinking ara. He never helped other villagers construct houses as he had the notion that a poor family man like him with no money to build house would be better off alone. He kept this same attitude until the time for him to construct a house came and finally realized all his mistakes.

Despite of his mistakes in his past still he got a new house constructed under Tarayana's housing improvement programme. Now he wish to have a longer days and shorter night as he prefer to work. Currently he is an example to his village as an assistant carpenter soon to become the master carpenter of his village. He is very much thankful to the concerned field officer who had reminded him to make his share of contribution to the village at times of any activity.

6.1.5 Story 5: Empowering Merak women.

Women of today living in and around the world have plethora of responsibilities are not only bound with the roles to manage the house but also take care of their childrens. They also prefer going outside for work to earn them an income to be able to empower themselves.

Just like that, 42 years old Pema Lhadon from Merak which is high up in the mountain is women who does the same job as mentioned above. She posses the skill of crafting and is a craftswomen of her village. Before the skill was just a hobby for her as she had no idea about generating income from it. After she enrolled in training conducted by Tarayana foundation on dry felting she started making income from it and even opened a local account to save the extra income for her childrens future.

CHAPTER 7

DISCUSSION

1.1 Analysis of questionnaire

This topic sums up everything the research wanted to bring to the readers mind. It is inclusive of all the topics that has been reflected in this study report. A total of 11 questions had been compressed into a link form and send to many individuals in order to grasp their understanding on the subject matter and how they feel about it. There were a total of 12 respondents with impressive understanding of the subject matter. This analysis part as well discusses on all the issues and challenges mentioned in this study report.

1.1.1 Define livelihood vulnerability as per your experience and understanding

Respondents answers:

“Livelihood vulnerability is defined as any situation that acts a obstacle in between living condition and situation”.

“Livelihood vulnerability as be defined as lacking behind to meet necessary needs and wants to oneself. Example can be good and shelter”.

“I personally feel that rural communities of Bhutan experience effects of national undertakings as well as global issues. They remain unaware and often ill equipped or with limited capacity to face challenges. Therefore, interventions to enhance their skills/capacities must be initiated and must be made more aware of the fact that their contribution at rural level contribute towards achieving national goals and larger global goals”.

“Acquiring the necessities of life”.

“People who undergo lots of challenges in living life”.

Analysis & discussion:

One thing is clear from the above answers that the respondents might not have studied in-depth about livelihood vulnerability but they surely understood what it is about. Some respondents had shared their experience and what they feel when it comes to livelihood and its vulnerabilities. While some had crystal clear concept about it.

1.1.2 Do you think the civil society organizations should come up with a new livelihood enhancement program or may be try improving the current one?

Analysis and discussion:

88.9% of the respondents chose to come with a new livelihood enhancement intervention which indicated that even at times of such pandemic or even after that Bhutan can and should march into a new journey with a new idea set towards uplifting the livelihood.

1.1.3 What do you have to say about Bhutan's livelihood vulnerability areas when comparison with other countries?

Analysis and discussion:

55.6% of the respondents chose that it is better when compared to other countries. This means that Bhutan's livelihood interventions are doing a great job and fulfilling its mission. 11.1% said it is as same as in other countries.

1.1.4 According to you how many percent of the Bhutanese have heard about self help group of Bhutan?

Analysis and discussion:

This response was as expected since most of the respondents that I chose were freshers and they were from totally different field of study. 55.6% said only 20% of the Bhutanese lack SHG knowledge even when they have been hearing about in the national news channel. Only 11.1% said 80% Bhutanese knows about SHG and these 80% might be those who are working in the CSOs.

1.1.5 According to you by how much percent Bhutan's livelihood might have got enhanced since 2008?

Analysis and discussion:

44.4% responses pointed at 25% as the total percent of enhanced livelihood since 2008 and 33.3% said by 85% the livelihood of Bhutanese got enhanced. The result might seem close enough but still the percentage should increase.

1.1.6 Do you think that the available report on livelihood vulnerability index of Bhutan has problem included?

Analysis and discussion:

As per response, 55.6% agreed to the question reflecting that the index need to be upgraded rectified further. But as per the findings and its result in this study there seem nothing that points towards any issue in the livelihood vulnerability index of Bhutan.

1.1.7 Do you agree that the livelihood experts should do more research on livelihood vulnerability in Bhutan?

Analysis and discussion:

This was a positive response and it could encourage many research scholars to continue doing more study on livelihood. 77.8% responses strongly agreed to it and 11.1% responses agreed as well as were doubtful. This showed that there are a lot of issues and challenges in terms of livelihood that still needs to be analyzed.

1.1.8 When did you first heard about SHG?

Analysis and discussion:

The response here seems balanced as 22.2% of the responses chose workplace, college and during high school and about 33.3% said from friends. The result here is totally unexpected as workplace and education should have been more. This result also points that the respondents are students.

1.1.9 Do you agree that there should be award for the best SHG in Bhutan?

Analysis and discussion:

88.9% responses said yes which indicated that this initiative could ramp up the SHG awareness among the Bhutanese and also encourage such group formation of different ages.

CHAPTER 8

CONCLUSION

Even though Bhutan is a gross national happiness country still the fact cannot be ignored that the existence of vulnerabilities by different factors on livelihood is present. As per the result is concerned there is plethora of vulnerability areas as same as of other countries and it's over all intensity has been seen as impactful and lasting despite of many sustainable strategies applied. The core reason being that it is a Himalayan country. The vulnerability has also been seen in the urban areas with most pertaining to unemployment and housing problem.

The SHG of Bhutan comprises of both the genders and according the information received there has not been any sort of problem while including men as the member as well. The SHG initiative has not only changed the lives of the beneficiaries but also uplifted their environment. The different livelihood intervention programmes has really benefited the beneficiary in terms of getting a strong shelter to being provided with a sustainable livelihood.

The question has been about how the intervention has been fulfilled despite of the vulnerable groups being in high terrain regions. Supported by government and foreign donors there are special teams that has gone far up in the rural areas mainly to fulfill the livelihood interventions.

CHAPTER 9

RECOMMENDATIONS

- a) Making water available during the harvest has been a problem for years and it still continues to remain the same. The household should be provided with the knowledge with regard to different types of irrigation in the best and easiest way possible and train them on how to use it in order to maintain a balanced use of water.
- b) Most remote schools which are far off from main water source which are faced with acute water shortage should be provided with rain water harvesting system technology instead of a roof gutter.
- c) In order to encourage the SHGs to come up with more attractive products there should be a award system like “best SHG of Bhutan”.

CHAPTER 10

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