

# **Scoping Study: Circular Economy in Lumbini and Bagmati Provinces**

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## Abbreviations

AFOLU	Agriculture, Forestry and Other Land Use
BFI	Banks and Financial Institutions
BuCCI	Butwal Chamber of Commerce and Industry
CE	Circular Economy
CSOs	Civil Society Organizations
CTEVT	Council for Technical Education and Vocational Training
DoFE	Department of Foreign Employment
ESOs	Entrepreneur's Support Organizations
FGD	Focused Group Discussions
GDP	Gross domestic product
IEA	Industrial Enterprise Act
IHA	Impact Hub Association
IHK	Impact Hub Kathmandu
MoALD	Ministry of Agriculture and Livestock Development
MoICS	Ministry of Industry, Commerce, and Supplies
MSME	Micro, Small & Medium Enterprises
NDCs	Nationally Determined Contributions
PEVCs	Private Equity Venture Capitals
PM	Participatory Methods
PRC	People's Republic of China
RoC	Roots of Circularity
SAFTA	South Asian Free Trade Area
SMEs	Small and medium scale enterprises
TVET	Training Vocational Education Training
WCN	Wildlife Conservation Nepal

## Executive Summary

The Roots of Circularity (RoC) project, led by Impact Hub Association (IHA) in collaboration with Impact Hub Kathmandu (IHK) and Wildlife Conservation Nepal (WCN), supported by the European Union, is dedicated to fostering a Circular Economy (CE) ecosystem in Nepal. Over a four-year span, RoC targets the Bagmati and Lumbini Provinces, aiming to catalyze a significant shift in Nepali policies, engage citizens, and cultivate an entrepreneurial landscape that embraces CE principles.

The project employs a multi-faceted approach, engaging civil society organizations, empowering micro, small, and medium enterprises (MSMEs), collaborating with educational institutions, and establishing the Nepal Circularity Alliance to promote stakeholder collaboration for CE policy development. Through these efforts, RoC seeks to integrate increased consumer demand for circular goods and services with a corresponding increase in the supply of circular products, services, and business solutions. This alignment is crucial for driving the adoption of policies that catalyze, enable, promote, and institutionalize CE practices in Nepal.

Key activities include a scoping study conducted among stakeholders in the Bagmati and Lumbini Provinces, comprising dialogues, focused group discussions (FGDs), and observations to assess the understanding and adoption of CE principles, identify opportunities and challenges, and establish potential partnerships and local teams. The study informed decision-making processes, including the selection of sectors for incubation, identification of potential members for the Nepal Circularity Alliance, and assessment of spaces and partners for establishing incubators. By engaging with diverse stakeholders and leveraging local insights, RoC aims to drive systemic change, foster innovation, and promote sustainable development in Nepal. Through its holistic approach and strategic partnerships, the project is poised to contribute significantly to the realization of global sustainability goals and the Nationally Determined Contributions (NDCs) of 2020, ultimately paving the way for a more resilient, inclusive, and circular future in Nepal. The Roots to Circularity (RoC) project in Nepal addresses critical challenges while leveraging significant opportunities in advancing the circular economy agenda.

Challenges include the lack of government support and coordination, financial barriers for entrepreneurs, digital disparities between rural and urban areas, inadequate partnerships between sectors, and non-inclusive policy-making processes. These challenges hinder the development of a thriving circular economy ecosystem. However, the RoC project identifies and capitalizes on opportunities to overcome these challenges. It aims to contextualize the circular economy in Nepal, generate knowledge, support entrepreneurs in integrating circular business models, foster partnerships through alliances, provide access to seed funds, and develop educational infrastructure. Additionally, the project emphasizes access to innovation and technology to empower entrepreneurs.

In conclusion, while challenges persist, the RoC project represents a beacon of hope, offering concrete strategies to navigate obstacles and unlock the transformative potential of the circular economy in Nepal. Through collaborative efforts, the project can pave the way for a sustainable and inclusive future, where innovation and entrepreneurship drive positive societal and environmental impact.

## 1. Background

Roots of Circularity (RoC) Introducing and Integrating Circular Economy (CE) in Nepal is a project spearheaded by Impact Hub Association (IHA) in collaboration with Impact Hub Kathmandu (IHK) and Wildlife Conservation Nepal (WCN) and supported by the European Union that aims to cultivate a Circular Economy (CE) ecosystem in Nepal. Over the course of four years, RoC will focus its efforts on the Bagmati and Lumbini Provinces, with the primary goal of driving a fundamental shift in Nepali policies, engaging citizens, and nurturing the entrepreneurial landscape to embrace CE principles. The project will engage with civil society organizations, empower micro, small, and medium enterprises, collaborate with academic institutions, and establish a Nepal Circularity Alliance to promote multi-stakeholder collaboration for CE policy development. RoC represents a significant step toward a more sustainable and circular future for Nepal, aligning with global sustainability goals and the Nationally Determined Contributions (NDCs) of 2020.

In the heart of Nepal, Roots of Circularity (RoC) is designed to create a positive change through a combination of activities to strengthen civil society and interventions to build the capacity of the entrepreneurial ecosystem in the CE sector. The project is developed also to engage with educational institutions to offer a holistic approach that can support an effective shift of paradigm in the medium-long term. These activities will allow for the integration between increased consumer demand for circular goods and services and an increased supply of circular products, services, and business solutions, which subsequently is expected to result in the adoption of critical policies to catalyze, enable, promote and institutionalize CE in Nepal. These actions are important and necessary to support Civil Society Organisations (CSOs) ability to engage as actors of governance and development processes in Nepal and,

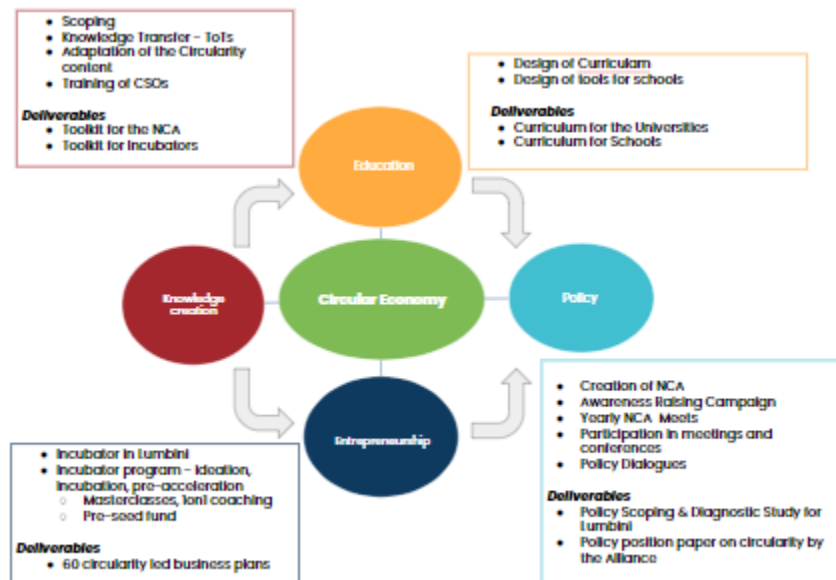


Fig 1: Flow diagram of project activities

in increasing their role in promoting a just transition in the CE sector. The project's core mission is to instigate a transformation in Nepali policies, engage citizens, and empower the entrepreneurial ecosystem to embrace CE. Through active engagement with civil society organizations, support for micro, small, and medium enterprises, collaboration with educational institutions, and the establishment of the Nepal Circularity Alliance, RoC is poised to foster a sustainable and circular future in Nepal, contributing to global sustainability objectives and the realization of the country's NDCs.

The type of enterprises (incubatees) will include established startups and MSMEs, for example, registered businesses (in Nepal), beyond the ideation phase with at least two years of traction in the market. MSMEs will be defined on the basis of the number of employees/employment with reference to the Industrial Enterprises Act 2020 and related papers. For example small is 5-19 employees and medium is 20-99 employees, whereas early-stage startups based on this distinction will be less than 5 employees. (Enterprises are expected to be from sectors such as tourism, waste management, fashion, agriculture, clean energy, forest and other land products - and find innovative ways to develop circular solutions for their business (GoN, 2020).

## 2. Introduction to Scoping Study

A scoping study, often referred to as a scoping review or scoping research, is a preliminary assessment of a research topic to determine the extent of existing literature and identify gaps in knowledge. It is a systematic approach to mapping and exploring key concepts, theories, evidence, and research methods related to a particular subject. The Scoping study is particularly useful when a research topic is broad, complex, or has not been extensively studied. This helps researchers refine their research questions and methodologies before embarking on more in-depth studies, such as systematic reviews or primary research. It's important to note that scoping studies do not aim to assess the quality of evidence or draw firm conclusions; instead, they provide a broad overview of the existing literature and help researchers plan and design subsequent phases of their research.

For the Roots of Circularity (RoC), scoping study was necessary for the following reasons:

- ***Clarifying Concepts and Definitions of Circular Economy***
- ***Fostering Dialogues and Exchanges to understand the understanding among the relevant stakeholders regarding the concept of CE***
- ***Comprehensive assessment based on the dialogues and exchanges***
- ***Creation of Nepal Circularity Alliance***
- ***Informing Research Priorities***

At the beginning of the project, a scoping activity was carried out among the active members of civil society organizations (CSOs), the private sector, academia, entrepreneur social organizations, entrepreneurs and policymakers in the Bagmati and Lumbini Provinces. The study was conducted through dialogues, focused group discussions (FGD), and observation with questions focused on gathering insights into the understanding and adoption of circular economy principles, to understand the opportunities and challenges for CE in the target provinces, while identifying potential partners and a local team to set up the establishment of the Lumbini incubator.

The scoping activity included up to 58 dialogue/exchange sessions (25 for Bagmati Province & 33 for Lumbini Province) in the two Provinces with stakeholders such as local authorities, industrial sector experts, and marginalized groups. The exchanges were about 1-hour in-person sessions held at their offices, IHK premise, Lumbini and virtually. More specifically, the dialogue with private sector representatives in the two target Provinces was conducted to understand the potential for circularity and industrial sectors that require such an intervention.

The scoping activity aimed at collecting relevant data streamlines the project’s decision-making and activities. To summarize, the scoping activity in Bagmati and Lumbini was critical for:

- Engaging local stakeholders,
- Identifying the sectors to focus on for sourcing and selecting potential incubatees during the program,
- Identifying potential members for the Nepal Circularity Alliance
- Assessing potential spaces, partners, and local team members to establish the incubator in Lumbini. In addition to the sectors identified through the activity, the action will also keep in consideration the sectors identified by the Nationally Determined Contributions (NDCs) 2020 (tourism, waste management, energy, Agriculture, Forestry, and Other Land Use (AFOLU)).

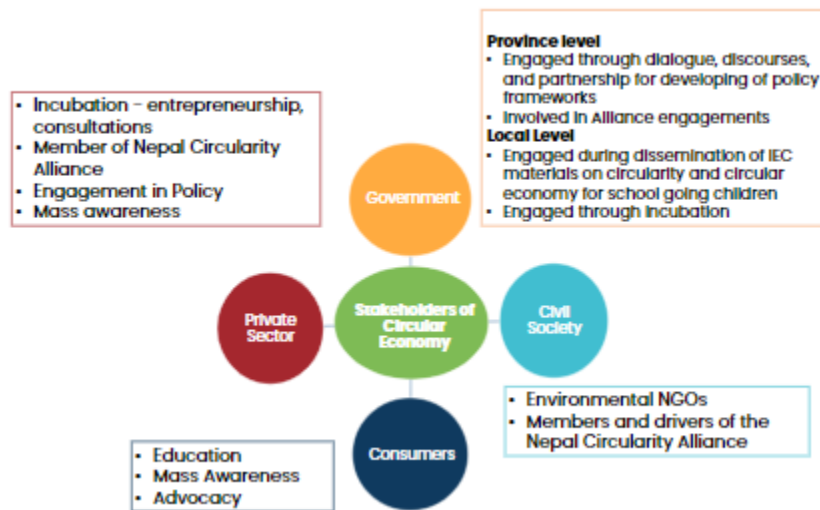


Fig 2: Stakeholders of Circular Economy

The results of the activity intend to summarize the pulse of the ecosystem and understand the scope for circularity assisted resilient enterprise development in Nepal.

### 3. Study Objectives

The primary objective of the study is “To engage CSOs, private sector, academia, and policymakers in Bagmati and Lumbini Provinces in the creation of the Nepal Circularity toolkit development and Alliance through dialogues and exchanges.”

The secondary objectives of the study are:

- To define key concepts, variables, and terminology associated with the research topic to establish a clear understanding of the field.
- To conduct a comprehensive assessment of the CE landscape, pinpointing priority sectors in the target regions (Bagmati and Lumbini) to focus on for sourcing and selecting potential incubatees during the program.
- To facilitate engagement with relevant stakeholders, enhance the capacities of project partners and collaborators, and ultimately culminate in the creation of the Nepal Circularity Alliance.
- To provide insights into potential research questions, hypotheses, and priorities for future studies.

## 4. Methodology and Approach

### 4.1. Approach

***Intersectionality Approach:*** Intersectionality offers a nuanced and comprehensive understanding of context, particularly in analyzing how different factors intersect to influence individual decision-making and behavior. Originally integral to women, gender, and sexuality studies, intersectional frameworks consider various aspects of identity as mutually constitutive. For example, gender interpretations are influenced by race, and vice versa. This approach is essential in studying the integration of circular economy in their existing business modules, as it focuses on how gender intersects with factors like disability to shape access to finance. By considering diverse intersections in individuals' experiences, interventions can be more effective, generalizable, and sociologically faithful.

***Gender Approach:*** The gender approach serves as a research methodology that explores how gender identities and relationships impact various aspects of social, economic, and political life. In the context of this study, focusing on entrepreneurs, particularly those from a marginalized and vulnerable population, the gender approach has been crucial from the literature review to the analysis. It involves analyzing how gender roles and expectations shape the entrepreneurs' experiences in access to finance, information and skills within the targeted location. The approach recognizes that gender norms may limit opportunities for women and stigmatize and exclude members of the LGBTIQ+ community. This methodology has been employed in crafting research questionnaires, ensuring questions are designed to understand power dynamics in various decision-making processes, such as access to finance, support to entrepreneurs, and access to skill and information. By adopting this approach, the study has elicited in-depth narratives from informants, contributing to a better understanding of the entrepreneurial ecosystem in Bagmati and Lumbini Province along with how the circular economy can support their entrepreneurial journey.

***Participatory Approach:*** Participatory Methods (PMs) include a range of activities with a common thread, such as enabling ordinary people to play an active and influential part in decisions that affect their lives. This means that people are not just listened to, but also heard; and that their voices shaped the outcomes. The participatory approach has played a key role in the development of this report, as all the findings are based on the narrations shared by the informants.



## 4.2. Methodology

This study has relied on two types of data which are a) primary data and b) secondary data. Both the data have informed this study and in accordance the research report has been developed.

### Secondary Data

**Literature review:** A literature review was conducted to gain secondary data. To understand the existing literature and research on the topics of interest, a literature review has been conducted as the first step of the research process. The literature review included both published and unpublished materials.

The information collected through secondary sources consists of the policies and other documents relevant for the sector such as Monetary Policy 2019/20, Industrial Policy 2011, Nepal Rastra Bank Annual Report Fiscal Year 2020/21, Fiscal Budget 2022-23, Fiscal Budget 2021-22, Nepal Rastra Bank Financial Access Report 2078, Nepal Rastra Bank Financial Access Report, The National Civil (Code) Act 2017, Training Vocational Education Training (TVET) Policy 2012, National Economic Survey 2020-21, Financial Literacy Framework of Nepal Rastra Bank (2020) Public Procurement Act 2007, Public Procurement Rule 2007, Agriculture Development Strategy 2015-2035, economic census and household surveys. The information gaps found in themes/groups have supported in understanding of the current situations and have been prioritized while collecting primary data.

For this study we have also looked at the published research papers such as “What is Circular Economy and How does it work?”, “From Linear to Circular Economy”, “Towards a circular economy: Key Drivers”, “Pioneers of the future: The Countries Leading the Way with Circular Economy Policy” amongst others. Likewise, we have also looked into pioneers in CE such as Ellen Macarthur Foundation, the United Nations, and the European Unions’ table talk series. The literature review has guided us in developing research questions as well as in the selection of the target audience for the study. The findings from the literature review have been provided in detail below.

### Primary Data

The study provides information on the situation of various indicators under study. The proposed study comprises 3 types of instruments (Dialogues, Focused Group Discussions (FGD), and observation notes). These instruments have been used to carefully design and obtain detailed qualitative information from the proposed study area i.e Bagmati and Lumbini Province.

**Dialogues:** The research study utilized dialogues to gather information about the community. These interviews were conducted with knowledgeable individuals who had firsthand experience in the community. Specifically, we sought input from entrepreneurs, CSOs, entrepreneur’s support organizations (ESOs), policymakers, academicians, and other stakeholders. In total, we conducted 58 dialogues, which provided valuable insights into the problems facing the community and potential solutions. These interviews were instrumental in shaping our research.

**Focus Group Discussion (FGD):** For this particular study we have conducted FGD with local entrepreneurs of the selected Provinces and also with the CSOs. While conducting the FGD we have

provided priority to the participation of youths and women entrepreneurs, as to support the larger objectives of the RoC's project.

***Direct Observation:*** Observation is a methodical tool for collecting data. It is utilized to study individuals in natural settings or naturally occurring situations. Observation techniques are commonly employed in data collection. This particular tool has contributed towards the findings and analysis of the report as it added more information and made the research findings multi-dimensional in nature.

### 4.3. Analysis and Report Development

***Thematic Analysis:*** Thematic analysis, a technique for analyzing qualitative data, was employed in this research. This method involves a meticulous examination of the data set to identify recurring patterns in the meaning of the information, aiming to uncover themes. The process demands the researcher's reflection and consideration of their subjective experience in interpreting the data. In this study, data collected through dialogues and FGD were transcribed and subjected to thematic analysis. The detailed findings and analysis derived from this method are presented in the subsequent sections of the research.

***Comparative analysis:*** A comparative analysis is a side-by-side comparison that systematically compares two or more things to pinpoint their similarities and differences. The focus of the investigation might be conceptual—a particular problem, idea, or theory—or perhaps something more tangible, like two different data sets. In the case of this study, comparative analysis has been conducted on the data sets collected from two Provinces, as during the field visit the team observed that the urban and semi-urban settings have a great influence on the entrepreneurial trajectories.

***Report development:*** This report provides a complete overview of the subject, including different research methods, literature review, and analysis. It provides valuable insights for future research and has the potential to make a significant impact in the field.

### 4.4 Limitations

While conducting the literature review, there were no literature available in the context of Nepal. Hence, the literature review on circular economy is more focused on developed countries. Likewise, since the study is only focused on Bagmati and Lumbini Province the findings and analysis of this study may not be applicable for other provinces. Since Nepal is very diverse geographically and there are various challenges due to the diversity of Nepal ( in terms of population) the study may not be applicable, as each province has its own set of challenges and needs. Hence, this study is limited to Bagmati and Lumbini Province only.

## 5. Target Location and Target Audience

The target locations for the RoC project are Bagmati and Lumbini Province. The target locations have been determined during the conception period of the project. Hence, for the scoping study as well these two Provinces have been selected. Likewise, apart from the scoping study, the project activities will further be implemented in Bagmati and Lumbini Province, where for Bagmati Province the RoC project

office will be based within IHK, and for Lumbini Province the office will be located at the Butwal Chamber of Commerce and Industry (BuCCI).

Within Lumbini Province dialogues and FGDs were conducted in 4 different municipalities/sub-metropolitan cities. Within Bagmati Province dialogues and FGDs were conducted in 4 different municipalities/sub-metropolitan cities.



Fig 3: RoC Target Locations in Nepal's Map

### Target Audience

The literature review guided the team in the selection of the target audience for the scoping study. Likewise, the proposals and concept notes were also taken into account while mapping the informants for the dialogues and FGDs. Below the list of informants have been provided Province - wise.

S.N	Sectors	Province	
		Bagmati	Lumbini
1	CSO	2	16
2	ESO	4	
3	Private	2	1
4	Entrepreneur	12	7
5	Government	2	

6	Academia	3	9
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*Note: Details regarding this table is mentioned in ANNEX I*

## 6. Literature Review

This section has been dedicated to the secondary data, a desk review has been conducted focusing on the governance, small and medium scale enterprises (SMEs) context in Nepal, policies governing SMEs, access to finance, and trade deficit. All the findings from the desk review have been provided in the below sub-sections in detail.

### 6.1. Definitions

Before getting into other aspects of the research, first, it is necessary to set a base for understanding and defining the terms such as SMEs, entrepreneurs, entrepreneur ecosystems, circular economy, etc. We have looked into the various definitions provided by the government of Nepal and by different leading organizations/academicians for this study and accordingly have selected the definitions. These definitions have been implied and taken into account during the field research and analysis of the findings. Below we state the definitions:

1. **Entrepreneurial ecosystems** have been defined as “combinations of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures” (Spiegel 2017: 50).
2. The industries of Nepal are classified into four broad groups based on capital investment. They are a) Traditional cottage industries b) Small scale industries c) Medium scale industries and d) Large scale industries (MoI 2067).
3. **Small-scale industries**, on the other hand, belong to the group of industries which have capital investment up to Rs 5 crores (MoI 2067) and are operated with the help of outside labor varying in the most cases from 10 to 25 heads. Woodcarving, dyeing, printing, cloth weaving, carpet knitting, oil processing are some of the examples of small-scale industries in Nepal.
4. **Medium-scale industries** which have capital investment between Rs. 5 crores to 15 crores (MoI 2067).
5. A startup enterprise refers to any enterprise or business operating with the use of novel innovation and creative ideas by an entrepreneurial group for the development, production, operation, and distribution of any goods, services, or process that have the potential for progress (Maharjan et al., n.d.).
6. **Circular economy** is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources (Ellen Macarthur Foundation, n.d.).

## 6.2. SMEs Status and Employment in Nepal

- According to the 2021 Census Data, 2.2 million Nepalis reside abroad, with 81.28% males and 18.72% females. Labor migration is a significant aspect of the economy, evident in 4 million permits issued over a decade, with remittances reaching 8.79 billion in fiscal year 2018/2019, contributing to 28% of GDP. In that year alone, 508,828 labor permits were issued by the Department of Foreign Employment, averaging 1,394 departures daily. Youth unemployment (15-29 years) stands at 19.2%, compared to 2.7% for the entire population, with an annual influx of over 400,000 young people into the labor force, emphasizing the employment challenges in Nepal (CBS, MoLESS, ILO).
- Agriculture is the primary employer for 86 percent of poor people, making growth in the sector critical for poverty reduction (World Bank 2018b). However, small and medium enterprises (SME), especially those working in the industrial sector, are important. According to the National Economic Census 2018 report, states that the total number of establishments in Nepal is 923,356. Likewise, the number of persons engaged in these establishments was 3,228,457. Out of total persons engaged, 2,012,237 (62.3%) were male and 1,216,220 (37.7%) were female (CBS, 2018).
- Supporting SMEs to grow will therefore boost economic growth, create jobs, foster innovation, promote sustainable industrialisation and contribute to economic diversification and resilience (OECD 2017). However, SMEs are disproportionately affected by market failures and business environment constraints. Their success depends, inter alia, on access to finance, knowledge networks and skilled workers (OECD 2017).
- The recent national economic census (GoN 2019) reports that there are 923,000 establishments of which almost 98% are single entity (so independent businesses), 50% are registered, 30% are female owned (22% in manufacturing and less than 10% in IT, but 40% in accommodation and food) and 55% are owned by a young (under 40 years) person. Just 1% is foreign owned. Some 40% are home-based businesses. On average, there are 3.5 persons (including the owner) employed per establishment captured in the census. About 11% of establishments are engaged in manufacturing; about 14% are engaged in accommodation and food services; just under 3% are engaged in agriculture, forestry and fishing (this is so low because most farmers are not registered).
- The census notes that some 394,000 establishments (43%) started between April 2015 and April 2018. If no establishments closed during the period, this increase would be equal to 20% per annum. We can however assume that there would have been some closures, so the number of businesses created would have been higher and thus the growth rate lower. This is approximately equal to the growth rate in the UK over the last three years which has averaged around 14% (with a closure rate of around 11%).
- Micro and Cottage industries cover almost 98.17 % out of total industries in low investment i. e. 21.44% and provide mass employment 81.75% in comparison to others. Similarly, cottage, small and medium scale industries cover almost 99.76% out of total industries in low investment i. e. 34.07% and provide mass employment i.e. 95.56% in comparison to large-scale industries. Therefore, to generate employment opportunities within a domestic economy, the Nepal government should promote and develop SMEs.

- The SMEs in Nepal have a low capital base, poor access to technology, and inadequate knowledge and information regarding business opportunities and marketing (Pandey 2004). Similarly, SMEs in Nepal also suffer from poor access to finance brought about by high interest rates, large collateral requirements, inconveniences associated with the process, a lack of information, and inadequate institutional capacity, among other things (NRB 2019).
- The MoF (2016) mentions that SMEs contribute 22% to the gross domestic product (GDP) and employ around 1.7 million people, without specifying the basis for the numbers. The contribution of SMEs to output, employment, and exports in the manufacturing sector is unknown.

### 6.3. Access to Finance, Market and Trade Deficit

- smaller firms tend to have more constrained access to finance than larger firms, be it in terms of having a checking/savings account, or having applied for a loan, or having an overdraft facility, or the collateral-to-loan ratio. Exporters are better placed than non-exporters in several of these indicators (Kharel & Dahal, 2020).
- A greater percentage of large and medium-sized firms in Nepal have a checking or savings account than their counterparts in other countries (by 4.9 to 5.9 percentage points). A greater percentage of Nepali large firms have an overdraft facility than large firms elsewhere (by 30 percentage points), with no significant difference in the proportions for small and medium-sized firms in Nepal and elsewhere. Nepali firms, whether small, medium-sized, or large, are more likely to have put up a collateral for their most recent line of credit than firms elsewhere (by 16.5, 18.2, and 20.8 percentage points, respectively) (Kharel & Dahal, 2020).
- Among firms that had not applied for any loans, 13.2% identified the high collateral requirement as the main reason, with small firms significantly more likely (15.3%) to say so than medium-sized firms (3.9%) and large firms (3.3%) (Kharel & Dahal, 2020).
- Among firms that had not applied for any loans, compared to small firms in other countries, Nepali small firms are significantly less likely to identify the absence of a need for loans as the main reason for not taking any loans (by 17 percentage points). Small firms in Nepal are significantly more likely to identify the high collateral requirement as the main reason (by 10 percentage points) than small firms in other countries (Kharel & Dahal, 2020).
- A significantly higher percentage (40.5%) of small firms view access to finance as a major or severe obstacle to their operations than medium-sized firms (18.6%) and large firms (15.1%). Exporters view access to finance as less of a constraint than non-exporters, especially if the exporter also uses foreign inputs. Compared to small firms in other countries, a significantly higher proportion of small firms in Nepal view access to finance as a major or severe obstacle (by 16.4 percentage points) (Kharel & Dahal, 2020).
- Procedural complexity, high interest rates (12.51% is the average interest rate charged to SMEs and an additional nearly 1% service charge is also levied), and collateral requirements are identified as major problems in obtaining loans from banks and financial institutions. SMEs in general find it easier to obtain loans from savings and credit cooperatives but identify high interest rates as the chief deterrent to obtaining loans from cooperatives (Kharel & Dahal, 2020).
- SMEs in some sectors are faced with a shortage of workers with the required skills. There is a limited match between the requirements of industry and human resources produced by the

- government-run Council for Technical Education and Vocational Training (CTEVT). There is a lack of industry-led training centers. There is hardly any link between academic institutions, vocational training institutions, and industry. There is potential room for government-industry collaboration (Kharel & Dahal, 2020).
- The bulk of SMEs have yet to access the few existing concessional loan schemes available through banks. Most of them are unaware of the schemes, which suggests the need for better dissemination of information about such schemes. Most concessional loan schemes, which entail an interest subsidy, are not SME-specific. Moreover, such loans are mostly for agriculture. Of the Rs. 47 billion in outstanding concessional loans provided under nine different schemes as of mid-January 2020, nearly 96% (Rs. 45 billion) were for commercial agriculture and livestock development (Kharel & Dahal, 2020).
  - The second-ranking category was loans for women entrepreneurs, amounting to Rs. 1.6 billion, which potentially benefits SMEs in the nonagricultural sector (Kharel & Dahal, 2020).
  - Foreign direct investment is not allowed in micro- and cottage enterprises, which have long been on the negative list of Nepal's foreign investment law. However, a new law, enacted in early 2019, which amended and integrated previous laws on foreign investment, allows technology transfer, including know-how sharing, even in industries on the negative list. The government's drive to attract foreign investment should also give attention to tapping this avenue, which may help micro- and cottage enterprises break into export markets and/or expand exports (Kharel & Dahal, 2020).
  - Nepali SMEs produce products that are eligible for preferential market access provided by several developed and developing countries under different schemes—in the European Union, the United States, Japan, Canada, the People's Republic of China (PRC), and India, among others. Besides supply-side constraints, a lack of knowledge of the trade preferences on offer is also impeding the utilization of preferential market access schemes (Kharel & Dahal, 2020).
  - Traders are not aware of provisions in trade agreements with neighboring countries. For example, while Nepali products face high customs duties and para-tariff barriers in Bangladesh, customs duties, if not para-tariffs, are lower for some products of export interest to Nepal due to preferential treatment provided by Bangladesh under the Agreement on South Asian Free Trade Area (SAFTA) (Kharel & Dahal, 2020). However, the exporting community is not fully aware of the preferential market access opportunity under SAFTA. Similarly, there is a provision in the Nepal-India trade treaty for concessions in the application of additional duty (excise) on articles manufactured in small-scale units in Nepal on par with the treatment given to similar articles manufactured in India. Although small enterprises stand to potentially benefit from this provision—which states that small-scale units are as defined by Nepal's Industrial Enterprise Act—the private sector in Nepal is largely unaware of it. As per discussions with exporters and former trade officials, this provision remains unused (Kharel & Dahal, 2020).
  - Lacking know-how on navigating the different stages of the export process, including understanding market access conditions and finding buyers, they are reluctant to take the plunge.

#### 6.4. SME Policies

- Nepal lacks a policy on startups and MSMEs, let alone a strategy for their internationalization and participation in GVCs. The Industrial Policy and the associated Industrial Enterprise Act (IEA) categorize enterprises into micro-, cottage, small, medium-sized, and large enterprises. However, substantive SME-specific provisions are rare. An SME-specific policy would provide a guiding framework for the government to initiate programs and schemes for building and strengthening SME capacity, including specifically the capacity to export (Kharel & Dahal, 2020).
- Weak coordination between, and conflicting priorities of, government agencies has resulted in not all the provisions in the Industrial Policy making it to the Industrial Enterprise Act, and some provisions in the Industrial Enterprise Act being repealed by the annual Finance Act, introduced alongside the budget. This affects SMEs too. The Department of Industry (under the Ministry of Industry) is the lead agency in the formulation of the Industrial Policy while the Ministry of Finance is the tax- and tariff- setting agency. For example, while the Industrial Policy refers to reducing the cost of raw materials and intermediate goods, there are nontrivial tariffs on critical imported inputs used by SMEs. Overall, the weak capacity of the public administration to coordinate and implement trade and industrial policies is a critical constraint (Basnett and Pandey 2014). It should be noted, though, that the recently introduced Industrial Enterprise Act 2020 has a provision that explicitly rules out any change that reduces the concessions, exemptions, and facilities granted under the Act (Kharel & Dahal, 2020).
- SME owners/managers need to be made aware of the available tax exemptions and concessions and other incentives and schemes. Even if on a limited scale, these could help SMEs reduce their cost of production and trade costs. Dissemination of such information could be a joint undertaking of the government and business associations like the Federation of Nepal Cottage and Small Industries (Kharel & Dahal, 2020).
- Although both the trade policy and the trade integration strategy acknowledge the need to integrate SMEs into GVCs and have specified policies to do so, the policies are very broad or ambiguous in nature in some instances and are poorly implemented in others.
- Data constraints impede understanding Nepali firms, especially SMEs. Urgent improvements are needed in record-keeping at key departments to create and update a comprehensive database of registered firms, covering micro to large enterprises. Essential details like sales value, sector, workforce size, and investment need inclusion. Researchers should access raw data from existing censuses and surveys. Regular surveys or censuses, occurring every five years, should focus on manufacturing firms, including SMEs, with attention to exporting firms. Introducing a panel dimension is vital for tracking firms over time, and the timely availability of raw survey data to researchers is crucial (Kharel & Dahal, 2020).

#### 6.6. Circular Economy and The Need of It

- Naturally available resources are being depleted ultimately leading to landscape and habitat disruption and biodiversity loss. Adopting the concept and principles of Circular Economy will help in protecting the environment. Reusing and Recycling is one of the aspects of CE and applying it would aware businesses to the wise use of natural



resources. This will help in the reduction of habitat disruption and biodiversity loss (European Parliament, 2023).

- With the growing population, the demand for raw materials is also increasing. However essential raw materials are finite (European Parliament, 2023).
- Transitioning to a circular economy can increase competitiveness, encourage innovation, foster economic growth, and generate employment opportunities (European Parliament, 2023).
- Nepal is prioritizing solid waste management, and exploring Circular Economy (CE) integration after a 2019 Nepal Economic Forum dialogue. Crucial in sectors like agriculture, CE minimizes external inputs, closes nutrient loops, and reduces environmental impact. Emphasizing waste reduction from the outset and understanding the supply chain's impact is vital. Given agriculture's substantial contribution to the national GDP, adopting the circular economy is pivotal for sustainability (Bhattarai et al., 2021).
- Technological innovation to loop materials and products back into production after their primary use is necessary. And Circular Economy's concept includes this. For this we must focus on three I's—indigenous knowledge, innovation, and incentives. Rediscovering discarded Indigenous knowledge and redefining development according to our values will encourage a 'reflect, realize, and revive' principle. Embracing the circular model today will be more beneficial, as the cost of waste management will increase in the future (CDKN, 2019).

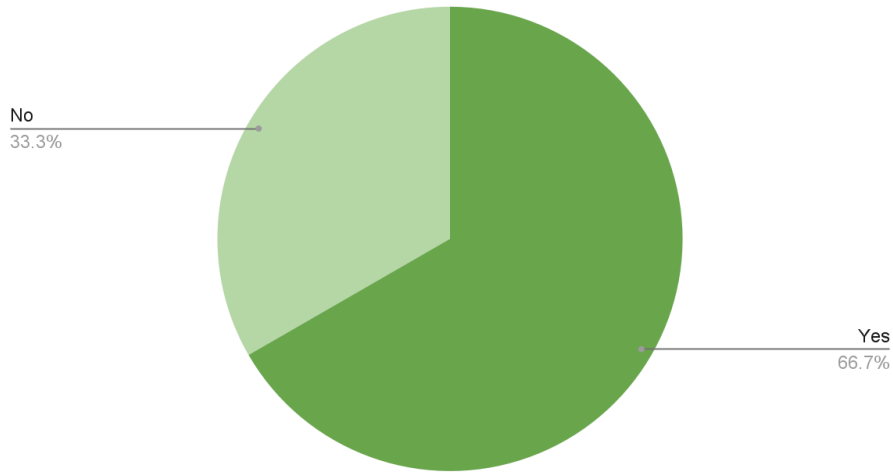
## 7. Findings

Based on the dialogues, FGDs, and observation notes the below findings have been derived, and all the findings have been grouped into various themes. All of the informants' interviews have been transcribed and the findings have been developed from the transcriptions. The findings from the field study are provided below in detail.

### 7.1. Mapping of Circular Economy Knowledge

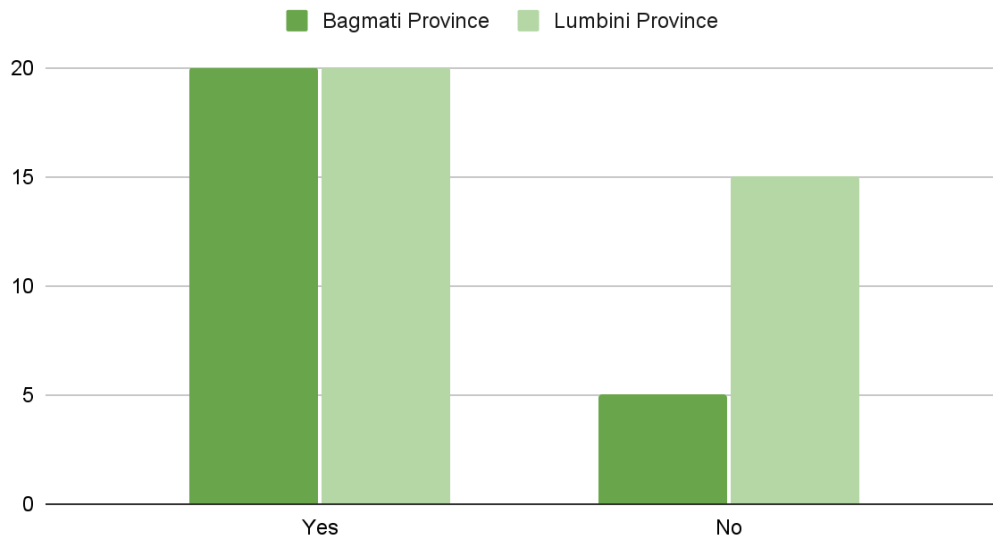
During the dialogues and discussions, one of the first questions that was asked to the informants was if they had heard and understood “Circular Economy.” According to the data collected, out of the total informants, 66.7% of the informants are aware of CE whereas 33.3% of the informants are not aware of the concept of CE (refer Figure 1).

Figure 1: Do you understand the concept of Circular Economy?



Likewise, when the data were compared Province In Bagmati Province 5 of the did not know about CE whereas in Lumbini Province 15 of the informants did not know the concept of CE (refer to Figure 2).

Figure 2: Province Wise Data on Understanding Circular Economy



Also, the majority of the informants explained Circular Economy closely to the definition provided in the literature which is “*Circular economy* is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources (Ellen Macarthur Foundation, n.d.)” The majority of the informants have mentioned the longevity of the resources, as well as the resources not landing in the waste field. A few of the statements provided by the informants are as

follows:

*“There we understood the circular economy as reducing waste from our consumption stream.”*

- *AG\_ROC\_BP1*

*“In simple terms, the resources or wastes at their end-stage when reused could be circular. Also, from an entrepreneurial point of view, reusing resources that already is available while designing and building products. Also perhaps, increasing the life cycle of products that are already in use.”*

- *SS\_ROC\_BP2*

*“Per my understanding, the circular economy is an economic model which promotes reuse, recycling and reproduction of materials that creates a sustainable system while minimizing waste and making the most of the resources.”*

- *RG\_ROC\_BP3*

## **7.2. Circular Economy a Need for the Entrepreneurial Ecosystem of Nepal**

One of the findings from the field study was that there is a dire need to introduce a circular economy within the entrepreneurial ecosystem. The majority of the informants have expressed that the Circular Economy is a must to strengthen the entrepreneurial ecosystem. One of the informants mentioned that a circular economy would strengthen the value chain in a way that someone’s product resource or even waste could be useful for someone else. This would support in reducing the cost of the resources which would directly lower the cost of the overall product, making it accessible to larger communities.

*“Entrepreneurship also heavily relies on efficiency drivers. It is important to reuse, recycle and reduce the production wastes or efficiency wastes. This can reduce the economic unit cost as well I believe. This happens because you are looking to minimize production waste. It helps to reduce the costs of land, labor and capital.”*

- *NM\_ROC\_BP4*

Also, the informants have mentioned that CE is important since through products and social enterprises they can raise awareness of sustainability, and waste management as well as raise conscious consumerism behavior within Nepal.

*“Circular economy also makes us conscious about how we control our resources for unnecessary consumption.”*

- *NM\_ROC\_BP4*

The majority of the informants have stressed the fact that through CE integration within their entrepreneurial businesses, they will be able to sustain their businesses. This again brings us back to the first point that by reusing and recycling their resources their production cost will be minimized. Likewise, by integrating CE within their businesses they will be able to produce their resources and lessen their dependence on imported resources, which has a direct impact on the overall economy of Nepal.

*“We don’t need to reinvent the wheel, there are plenty of examples. Even in India, billions of dollars have been invested in ensuring proper waste management and circularity, because they are confident that they have policies that safeguards their investment.”*

- *PP\_ROC\_BP9*

*“Of course it does. From a sustainability point of view as well, we should be focusing on the concept of a circular economy.”*

- *SS1\_ROC\_BP11*

Likewise, one of the other findings from the field study was that entrepreneurs whose businesses already follow the circular economy theory have been able to preserve the environment. They have stated that circular business models can help the ecosystem as they support businesses to think about their waste and how they can use the waste to be reutilized within their businesses again. Through this, they have been able to decrease waste production and further support in preserving the environment.

*“It can help the ecosystem as you are not creating any extra waste and everything is utilized. Hand in hand, waste creation is prevented and the environmental side is also being supported.”*

- *BB\_ROC\_BP13*

*“If one tree can produce 8000 straws and if you buy 8000 straws from us, we used to plant a tree for you. So that's the regenerative process of the circular economy.”*

- *YR\_ROC\_BP15*

*“Our business model preserves the environment. The product goes to the market and it will do well because it has a remarkable story in itself.”*

- *RM\_ROC\_BP16*

During the field study, one of the findings that stood out was how Nepali markets have been impacted by globalization. One of the major impacts of globalization has been on indigenous skills and craftsmanship.

The informants have expressed that indigenous practices are circular in nature, as the indigenous knowledge focuses on ensuring that they are in harmony with the environment. A few of the indigenous skills and products are nettle fiber, medicinal herbs, minerals, and community forestry amongst others.

*“The values and the resources that we use are environmentally friendly and sustainable. If you look at Nepal and a lot of indigenous practices, without knowing that it's circular, a lot of things are happening, whether it is water usage, even electricity, paper packaging, or whatever it is. A lot of our indigenous knowledge is about ensuring that we're living in harmony with the environment and that the resources are sustained for a longer time. You just simplify packaging and encourage people to think about the impact of whatever they're doing and see how best they could limit adverse impact right for the environment.”*

- SR\_ROC\_BP17

However, one of the informants rightly pointed out that if proper strategies and actions are not planned in time, then CE will remain as a concept. Hence, from the dialogues and FGDs, it is clear that there is a dire need for a circular business model as it supports the entrepreneurs to sustain their businesses and decrease their dependence on imported resources all the while preserving the environment. Likewise, it will also support preserving the indigenous knowledge and skills that are getting extinct due to globalization.

*“This idea of a circular economy has been stalled for a long time, and if proper actions are not taken, it might just stay as a concept without any action taken for it. Hence, we should subsidize circular products, financing should be made easier and accessible as well.”*

- SS2\_ROC\_BP12

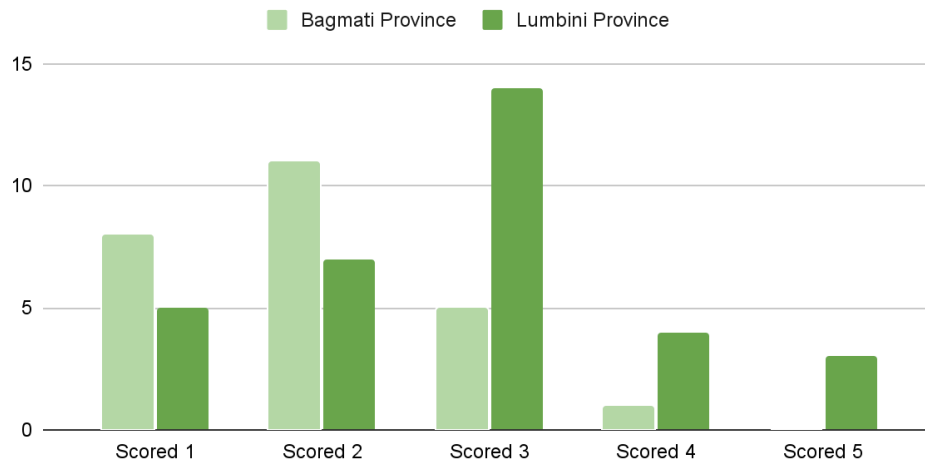
*“Local craftsmen that we identify have generational skills, and they still are continuing the legacy. But right now, we live in a globalized economy, we depend on multiple economies for many things. And this has dragged us in a weird time, where we need to navigate how to revitalize these generation old skills. We need to think out of the box, we need to identify what the market needs and trends. And we need to meet these needs through these local communities using these local skills.”*

RM\_ROC\_BP16

### **7.3. Access to Finance and Investment a Paine to the Entrepreneurs**

One of the questions during the field study was focused on understanding the present challenges of the entrepreneurs in Bagmati and Lumbini Province and almost all of the informants expressed that access to finance and investment is the biggest challenge.

Figure 3: Do you believe social enterprises have access to the appropriate type of financing for their stage of development?



Note: 1 is the lowest score and 5 is the highest score

In Figure 3 we can see that the majority of the informants from Lumbini think there is access to finance but when we look at Bagmati Provinces data the informants have mentioned that they do not have access to finance as the majority have scored 1 and 2. In Lumbini Province also the majority of the informants have little access as they have scored 3 the highest, followed by 2 and 1 but in comparison to Bagmati, Lumbini has more access to finance.

Some of the informants mentioned various schemes provided by the government such as Koseli Ghar, where the government supports showcasing products produced by locally produced resources. Likewise, the government has also provided support to the entrepreneurs by providing a certain exemption in taxes. But apart from it, the majority of the informants expressed remorse and frustration as one of the informants said that when approaching the government with their schemes of accessing 15 to 20 lakhs with 1 to 2 % loan interest they were told that the scheme has been discontinued.

*“We approached the government scheme for a different project for which we were selected. We were hopeful that we were getting a subsidized loan, but then COVID struck and everything stopped. We approached the government afterwards. The loan was around 15-20 lakh at 1-2% interest rate. But, then they told us that the scheme was discontinued. We were ready with proposals, scoping (factory location, etc.), hence we decided to push for it. Again, they shrugged us off saying, your work does not fall in any of our categories (The project was on Agro Waste). They wanted us to change our project category to “Women Entrepreneurship” for which we could only receive Rs. 7 Lakhs. 7 Lakhs with 7-8% interest rate was outrageous considering no factory let alone a business could be started with that amount. We were discouraged, because we did not get what we set out to do.”*

- AS\_ROC\_BP10

Likewise, the informants further mentioned that they were discouraged from taking the loan through government schemes as the interest was very high. They expressed that they could not take the loan due to

the interest rate as it was not a sustainable approach for them. One of the informants mentioned that Banks and Financial Institutions (BFIs) were like money lenders in the past, as they were not supportive of their initiatives or the impact they could have on Nepal's economy.

***“In Nepal, I have not seen BFIs be that helpful to people who want to take risks, banks are very conservative. They are just another form of moneylenders that we used to have in the past.”***

**- SA\_ROC\_BP25**

One of the major findings from the study was that access to finance is a major hurdle for entrepreneurs, mostly for marginalized and vulnerable groups in Nepal. To access loans from BFIs, the entrepreneurs have to put in collateral as well as there are various layers of documentation as requirements. Due to a lack of education and as well as due to their socioeconomic status, they are not able to access the loans provided by the BFIs.

***“Very few people from marginalized communities, very few women and very few entrepreneurs who want to work on something end up getting these funds and that too not so easily. Banks require collateral and ask for various other things which obviously will be difficult for marginalized groups to provide. So again, those who can provide the collateral end up getting access and those who can't are still behind.”***

**- SA\_ROC\_BP25**

One of the informants shared a good practice, where they mentioned that the women they work with formed a small committee and the group would put back a certain amount generated by selling their products in a box. The amount would be accessible to women committee members, who did not have to put collateral or fill lengthy documents. Likewise through this process trust has been established among the women committee members and further in this way they can unburden financial issues.

***“When working with the people I work with, I have found that women there make a small committee and they take a certain portion and put it in a box. And when someone is experiencing problems, they use that money to help them out. And this is better than putting collateral with banks. In a way, this is good as a circle of trust is built and I personally also help them if they are in any financial trouble. I think this ensures they aren't burdened with financial issues like banks taking away their houses.”***

**- RM\_ROC\_BP16**

In Butwal majority of the entrepreneurs were from the agriculture sector, where the majority of them stated that the government should provide subsidized loans to farmers. They raised a major issue where they had mentioned that a lot of farmers are quitting agriculture and leaving the country seeking foreign employment due to a lack of investments. One of the consequences that Nepal may face is that there will be an increase in dependency on imported goods, which will have a great impact on the economy of the country. They further shared that even despite receiving loans the farmers are not able to return the interest to the banks. One other issue pinpointed was the open board issue, where the farmers stated that they cannot compete with the prices of India and China due to which they are willing to take risks and invest in their businesses.

***“Government should provide subsidies to the farmers, so that they can sustain their livelihoods. Now farmers have stopped growing their foods. Government support is highly needed. Taking a loan from banks cannot be the ultimate solution, as paying interest to the bank is not easy. If the government continues to ignore this situation, the farmers not only in Butwal but from all over the country will suffer, ultimately leading to brain drain.”***

**- FRU\_ROC\_LP01**

***“As we know that our nation’s economy is in recession. The only financial support we have access is through bank loans and if we start a business through this support, it's not sure that we will be able to pay the bank in due time. Tackling this is a huge challenge. We have also seen that many businesses that were in the long run have now shut down and their owners are now leaving the country for foreign employment.”***

**- KP\_ROC\_LP14**

Likewise, the majority of the informants mentioned the need for a seed fund for startups and entrepreneurs, as it provides them with relief even though it is for a short period of time. Further, they mentioned that since entrepreneurs come from various economic backgrounds they have to rely on a job for a few years before they can venture into entrepreneurship.

***“Seed funding is very important. Heavy investment is really necessary. This is because not all of us come from a economically strong background. Looking at this what I felt was, Yes I do want to be an Entrepreneur and I will be but to start my own business I have to collect and save money. For this, I will have to find a job, work there and after a year or two, I will be able to work on establishing my business.”***

**- KK\_ROC\_LP15**

#### **7.4. Lack of Policies Leading Entrepreneurs to Fail**

One of the major challenges identified from the field study is that the majority of the informants expressed that due to a lack of policies entrepreneurs struggle to establish as well as sustain their businesses. The unstable political situation of Nepal has hampered the development of progressive policies that could have supported the entrepreneurial ecosystem of Nepal. In the below finding, the informant has mentioned that if policies are not devised and kept in place that incentivize entrepreneurs then there will be a huge setback for startups and MSMEs sector as people would not like to invest in them in the long run.

***“The first challenges are policies. There should be policies that incentivize certain industries. People will not work in these sectors, if there are not proper policies from the stakeholders.”***

**- PP\_ROC\_BP9**

In the above sections it has been stated that since the entrepreneurs have to depend on imported raw materials for the production of their products, one of the informants mentioned that due to the gap in policies, they have shifted to importing the products which is more cost-effective than importing the raw materials and producing the goods in Nepal. Nepal’s economy will see a great impact if the entrepreneurs can produce the raw materials here in Nepal as



it will decrease the dependency on imported products as well as the profit generated from their products will support in development of the entrepreneurs' ecosystem.

*“Along with that, I also felt that there were big gaps here and there on the support one is supposed to receive law and policy wise. We were trying to manufacture products in Nepal itself, and if such products are manufactured here it would be very good from the sustainability point of view but we faced more challenges while importing raw materials than while importing the manufactured products.”*

- YR\_ROC\_BP15

The instability of the policies has a greater impact on the entrepreneurs of Nepal, as the policies are frequently changing. Apart from the instability of policies, there is a lack of transfer of information to the entrepreneurs. One of the informants mentioned that if there is a change in policies then how is the government transferring that knowledge to the concerned persons? If there is an update on policies the entrepreneurs are not aware of, there is a lack of awareness-raising mechanism from the government due to which the entrepreneurs are not able to develop concrete strategies.

*“At the top level (not in detail), what we have realized is that doing business in Nepal is tough. It is because similar services like Pathao and Indrive are foreign companies with foreign investments coming into Nepal and doing this. If policies are set in such ways that it helps local players like us where it makes it easier for us to plan and operate. For businesses like us, this instability hits us pretty hard. If it was known that the VAT would be back again, we would've planned accordingly and set prices to compensate for this year's added VAT. The policies need to be stable.”*

- SS3\_ROC\_BP18

Apart from frequently changing policies, one finding was that there is a lack of assessment of the impact of the policies. Once the policies are devised there are no monitoring mechanisms in place. Hence, there is insufficient information to learn if the policy devised has created any impact or whom it has impacted. Without a proper monitoring mechanism of the policies it directly impacts the implementation of the policies. One of the informants mentioned that there are policies in place, but there is a lack of implementation of it.

*“Another one is frequent evolution of policy. There is no frequent check-in balance of the policies that are made in a phase of once collected stats, data and context. There is no assessment on the impact of the policies made and how it has been received by the beneficiaries. Inadequate monitoring is one of the key issues regarding things or points that needs to be improved and amended.”*

- UK\_ROC\_BP21

*“In a place like ours where the government is futile and unstable, where there are not many penalties and bribery is high, it is essential that there is an unbiased grip on policies. It's not like we don't have policies, we have such diverse policies that many countries don't have but sadly it's not implemented. And even in the places it has been implemented, it is not rightly done. And if rightly done, again many forces don't allow it to run smoothly.”*

- *SA\_ROC\_BP25*

The other finding which stood out was that entrepreneurs are not made part of the policy-making process. The committee consisted of representatives from the bureaucracy, due to which there was a lack of understanding of the challenges faced by the entrepreneurs. Policies are established to make the process or implementation of certain strategies efficient but due to a lack of understanding of how entrepreneurs function and what challenges they face the policies do not support the progress of the entrepreneurial ecosystem. This clearly shows that the policy-making process is not inclusive in nature. Also, one point was raised by an informant, where they said that if entrepreneurs are not made a part of the process of developing policy then there will be a lack of ownership.

*“One big gap is regarding the making of policy for startups. One big question that arose was who is making this policy and for whom. There were talks of setting up a meeting with a few startups and understanding their needs, but later representatives from FNCCI and Nepal Planning Commission made policy without any relevant stakeholders. This raised another big question regarding this on how someone who has no understanding of various challenges that start up goes through and their needs to overcome those challenges. This is a big gap in policy making.”*

- *UK\_ROC\_BP21*

*“If the government can set policies, encourage telecom companies to help us to curb these issues, it would be good. But what the government does is set up an advisory board with their own people, who hardly do their research where in fact they should be bringing in people like us who actually know and understand the market and needs, the board would be 10 times more effective.”*

- *SS3\_ROC\_BP18*

*“Intention of policy making and policy makers doesn't look good. Entrepreneurs are disregarded on the matter of involving them in policy making. The policy made really does not support the entrepreneurial ecosystem where the entrepreneurs feel recognized and motivated. There is no ownership.”*

- *PRG\_ROC\_LP12*

*“When I search for the policy makers that are really thinking about the future and how to affect the future? I don't think there is any because our political system only encourages short-term behavior and that's why we are all suffering, including the circular economy. This is why our industries are falling because nobody is thinking about our industry, like looking forward, not just the tourism industry but every other industry.”*

- *TS\_ROC\_LP08*

Likewise, the entrepreneurs stated that they are not aware of how the policies are developed, and who develops them. Whether it was made by the panel of experts or relevant stakeholders are involved in it or not.

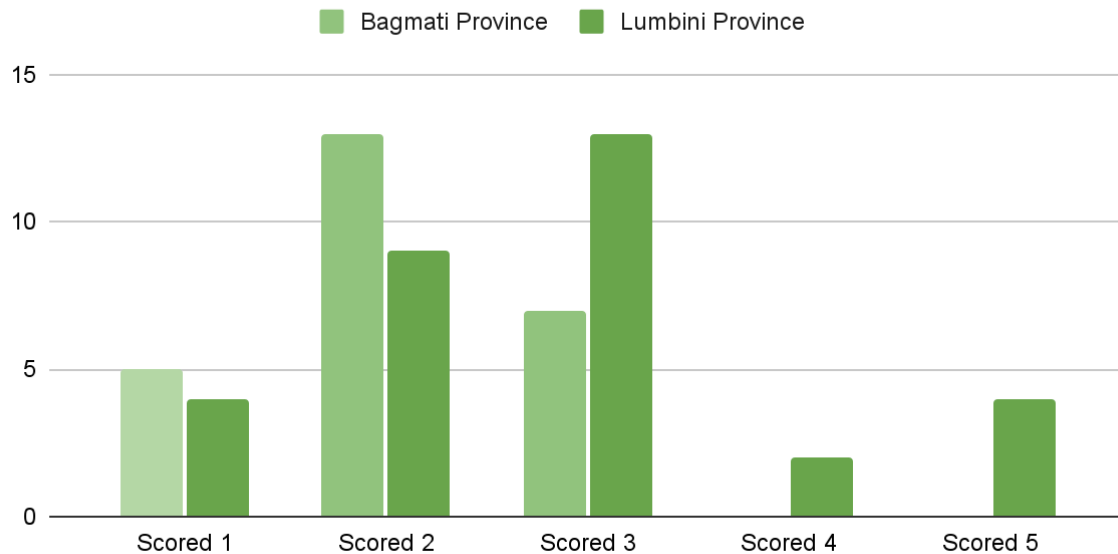
Likewise, they raised questions if the policies are made through proper research. There are problems related to entrepreneurs but likewise, it is found that the policies made do not give proper solutions or guidance to solve the existing problem.

*“The mechanism of following the process of establishing your business is so tiring that people think of changing their work line and moving to other jobs. The aspiring entrepreneurs are demotivated due to this. The policy makers should do research and meet up with the existing entrepreneurs, communicate with them and try to give solutions/guidance to the real time problems through the policy rather than problematizing the existing problems.”*

- TPU\_ROC\_LP09

As stated earlier, in Figure 4 the informants from Bagmati and Lumbini Province scored 2 and 3 respectively. This shows that there is no or limited involvement of relevant stakeholders during the policy-making process which again validates the findings from the dialogues conducted during the field study.

Figure 4: The process for developing policies to support social enterprise development is inclusive.



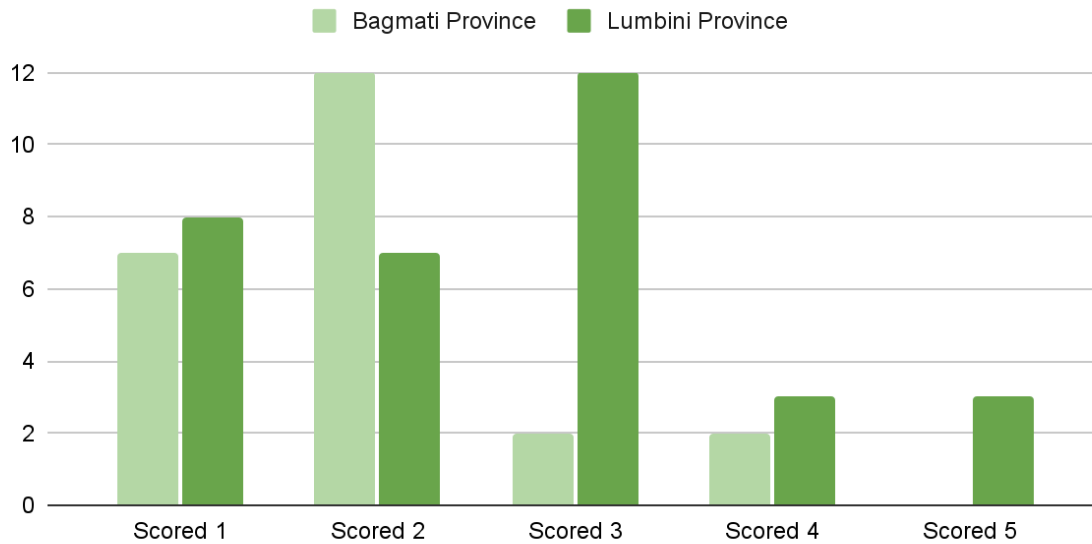
Note: 1 is the lowest score and 5 is the highest score

Likewise during the field study when questions about strategies related to social enterprises were raised majority of the informants from Bagmati Province scored 2, which states that there is no formal acknowledgment of social enterprises in strategic government. Likewise, the majority from Lumbini Province scored 3 which means that there is a strategy but it lacks political support and/or policy objective (refer Figure 5). Likewise one of the findings from the study was that there is a dire need for strategy from the government and not just short-term schemes which are not accessible to people from low economic status.

*“Strategy should be developed by the government that encourages farmers to produce. Local government introduced a scheme of leasing land for a year which is not sustainable.”*

- *BKS\_ROC\_LP03*

Figure 5: A formally endorsed strategy for social enterprise development exists.



Note: 1 is the lowest score and 5 is the highest score

Likewise, in terms of a circular economy without policies in place, these concepts may remain just as a concept for entrepreneurs. One of the findings is that without policies that support incentivizing businesses that use circular businesses, it will not be a priority of any businesses. One of the informants expressed frustration that when such concepts are introduced it falls on the shoulders of the private sector. The informant further expressed that if the policy does not support the business in any manner why should they implement it as it comes off as an additional cost to the business.

*“I think my biggest frustration with almost every good thing like circularity is that a lot of people think that the private sector can change everything but if the policies don't support us why should it always be the private sector that has to cut into their profits for things like circularity. We are the ones who have to marginalize our profits, so that Nepal becomes a better place and it's not fair to ask us to do that all the time.”*

- *TS\_ROC\_LP08*

### 7.5. Innovation a Must to Establish Circular Businesses

One of the findings was that there is a dire need for innovation, which fosters support the entrepreneurs by creating opportunities for entrepreneurs to be more innovative in product design and manufacturing processes by involving techniques that are environment-friendly and sustainable, developing collaborative networks to foster interconnectedness and support the entrepreneurial ecosystem making it accessible to more funding and

gain a competitive edge. There is a high demand for innovation from entrepreneurs as the entrepreneurs have to depend on imported resources which increases the cost as well as the production time.

***“I think having a vivid experience, one of the challenges that we face is innovation and if it is always good or the existing way of innovating things can be incorporated in the current spectrum of things and circularity.”***  
***HT\_ROC\_BP7***

The need for innovation is not just tied to the cost-effectiveness of manufacturing products but also to breaking the existing traditional system. Innovation supports various sectors to become more competitive and effective, but by implementing the traditional methods we are empowering the traditional system to exist and not create space for innovative ideas. Innovation can support in decreasing the time of production and as well as support bringing creative ideas that support in conserving the cultural traditions.

***“The third one is infrastructure and technology. Rudimentary systems won’t work anymore. Manual hand segregation of wastes is now a myth. There also needs to be safeguarding of capital expenditure, which again should come from the policy side. We don’t need to invent technology, there are technologies globally available and we just need to transfer.”***

***- PP\_ROC\_BP9***

Also, another finding was that innovation and alliance formation can support one another by establishing connections with the wider community. Innovation can help in learning the Indigenous skills and inventing a tool or methodology that supports the Indigenous community to transfer their skills to the new generation.

***“For us we need an innovator, and when you are thinking about the market and producing really good stuff to cater a large audience. And while going for mass production, sometimes these indigenous skills might not be feasible and we need some innovator who can help us in the process. And alliances might help us connect with such innovators.”***

***- RM\_ROC\_BP16***

Also due to the lack of innovation, the majority of the informants mentioned that they have not been able to meet their potential. Despite having the knowledge, informants mentioned that they are not able to break the traditional system of functioning and goods production. There is a lack of awareness of innovation, as there are not many institutions that are able to provide that knowledge to the entrepreneurs due to which they have not been able to break the system.

***“There should be integration between systems, regardless if it is isolated or not. The system of innovation has obstruction, and we have not been able to explain them properly. In the context of a circular economy, the problems that occur frequently are, recycling industries are not being encouraged and promoted. Investment is also not being promoted here. We don’t have appropriate technologies here hence, foreign investment could help here. But foreign investment is not allowed, but the recyclable wastes are being allowed to be exported due to lack of technology.”***

***- IBJ\_ROC\_BP20***

*“It is difficult to do something with the current system. We have not been able to keep up with the modern ways of recycling. Most of scrap metals, papers, etc. are being exported and not recycled here due to lack of technology. There are policies but they have not been implemented properly.”*

- *IBJ\_ROC\_BP20*

Likewise, as stated earlier there is a dire need for innovation within the entrepreneurial ecosystem, especially for startups. These can be done through incubation programs and seed funding. If a proper nurturing process is in place for the entrepreneurs the informants have mentioned that they will be able to sustain themselves beyond the funding period. Hence, access to such programs needs to be made especially for vulnerable and marginalized populations.

*“Also, access to technology and funds must be made easier. We are resource and raw materials rich and we need to capitalize on this potential as well.”*

- *IBJ\_ROC\_BP20*

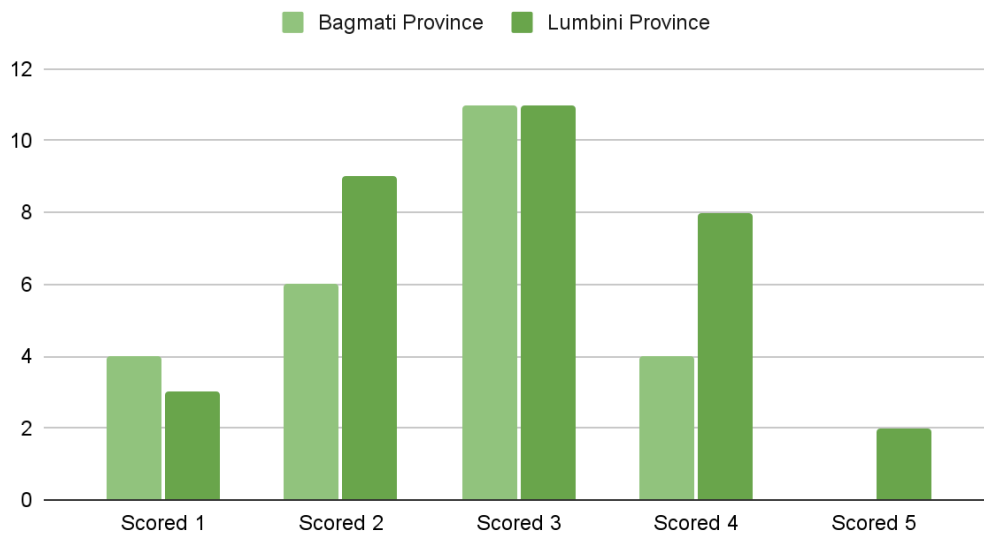
*“Currently in Nepal, I think introducing technologies will be a good place to start. We need to start from a “micro-level” so people can understand it in layman’s terms as it is a fairly new concept.”*

- *SKK\_ROC\_BP23*

## **7.6. Lack of Government Partnership and Networking for Strengthening Entrepreneur Ecosystem**

One of the other findings was the lack of support from institutional bodies and in this study the support from the three tiers of government ( Local, Federal, and Provincial Government). In Figure 6 we can see that informants from Bagmati and Lumbini Province both scored 3 the highest, which translates to that there is no statutory body for social entrepreneurship and that the chamber of commerce or similar bodies do not engage with social enterprises. Likewise, it also shows that the informants think that there is no formal recognition system for social entrepreneurs.

Figure 6: Institutional bodies support and engage with social enterprises.



*Note: 1 is the lowest score and 5 is the highest score*

Likewise, the informants mentioned that there is a lack of understanding within the government on how entrepreneurs can support the economy of the country as well as how it will support the communities that they are representing in the political sphere.

***“I think the government needs to realize that these ventures will help the communities and the people they are representing.”***

***- RM\_ROC\_BP16***

Apart from the lack of support from the government, one of the findings is that there is a lack of synergy between the stakeholders, government, consumers, producers, and policymakers amongst others. There is a lack of common voice which is acting as a hindrance to the sustainability as well as development of the entrepreneurial ecosystem. Hence, to build the synergy between multiple actors in the entrepreneurial ecosystem there needs to be continuous dialogues and documentation of these dialogues. Apart from the dialogues, these documents and information need to be made accessible to the right stakeholders.

***“There also needs to be a synergy between stakeholders, consumers, producers, government, etc. We need a common voice among all stakeholders.”***

***- PP\_ROC\_BP9***

***“We created a group to monitor, evaluate and provide a way forward regarding the challenges and possibilities of farmers in the entrepreneurial ecosystem. We are tied up with Krishi shakha and Pashupalan shakha, but the local government support is still lacking. While we were proceeding with this modality, we came to an agreement with the local government to provide a loan to the farmers without collateral for the amount of 15k***

*with only 6% interest rate. But the role of government here is very inactive and that has caused many challenges as moving forward.”*

- *DS\_ROC\_LP07*

*“Consultation with stakeholders is important. There also needs to be a policy dialogue and implementation from the findings must be quick. “*

- *PP\_ROC\_BP9*

Another finding was that there is a wrong concept existing within the community where people perceive that the private sector and the government cannot work together. Whereas, to uplift the economy of Nepal there is a dire need for collaboration between the government agencies and private sector. Once the collaboration is achieved then only the entrepreneurial ecosystem can develop.

*“So if you look at Nepal, I think something that's super important is, you know, we have this tendency like private sectors, separate and government is separate and civil society is separate. The reality is, Nepal will never achieve its goals unless industry or private sector shifts and believes it's possible. It is an investment, right? It's a high investment. If you look at the world as well, it's quite expensive. The conversation needs to happen, especially between the policy makers, regulators, industry and any other technical experts that there may be. I think that's a good starting point.”*

- *SR\_ROC\_BP17*

Another finding is that apart from the government's lack of support there is also a lack of initiation from the community members and private sector to collaborate and build synergy to uplift the country's economy. There is a lack of openness from both sides as private sectors feel hesitant to work with the government due to layers of paperwork and bureaucracy. If the government and private sector do not come together then Nepal will forever be dependent on the remittance sent by the labor migrants.

*“I say it goes both ways. Until and unless one side does not start the other side won't as well. Obviously we know getting governmental work done has a lot of hassle, from making passports to any other work. The way I see it is, there needs to be openness from both sides where more than making money/monetary aspects should be put aside. I think when the government and the private sector come together it should be about growing the country, its economy and society and also making sure that in the long run we don't rely on remittance.”*

- *SS3\_ROC\_BP18*

The role of government in the entrepreneur ecosystem is to develop a transparent policy-making process and make it inclusive. The government can develop a policy that supports subsidizing businesses that incorporate a circular business model. Also, they can create a healthy market competition through minimum government intervention with appropriate policies in place. Tax exemption, subsidies, or imposing taxes on counter-affecting this idea can be used.

Apart from it, the major finding is the lack of a mechanism to communicate with the government agencies and relevant stakeholders. Networking and alliances will only be effective if they learn to communicate with one



another. The informants have mentioned that before networking they should learn to communicate about their products or services, then connecting with the right network will support their businesses in the long run.

*“I think we need to learn how to communicate/speak with people before delving into networking and collaboration. I think collaboration and networking is important but we should not hurry. Don't sell yourselves and your products but take time to understand the person you are networking with. It's mostly about building relationships and working together. Also, the important thing is to know and understand who to network and collaborate with. You need to figure out what kind of network and support system you need and also what you are giving back to the network.”*

- **PB2\_ROC\_BP22**

Likewise, one of the informants expressed that the government is more focused on dollars that are leaving the country whereas their focus should be on supporting the local brands (entrepreneurs). If the government can support the Nepal-based businesses it has a direct impact on the growth of Nepal's economy, hence there is a need to shift the priority of the government from outgoing dollars to sustaining the Nepal-based businesses.

*“The government has all these rules for restricting dollar outflow but we're not looking at sectors bringing dollars inside. I mean, again, if I really had to sort of wish for a better world for me, I would have government support for being a local brand.”*

- **TS\_ROC\_LP08**

As stated earlier, the government needs to shift its priority to local business support because one of the informants mentioned that since the government is not able to pay back to the banks the schemes developed by the government focusing on access to finance for women and marginalized groups have been brought to a halt.

*“Government has not been able to pay the amount to the banks of Nepal, therefore, the provision of providing 15 lakhs of loan to women entrepreneurs at a minimal interest rate has been made unavailable by the banks.”*

- **SMS\_ROC\_LP18**

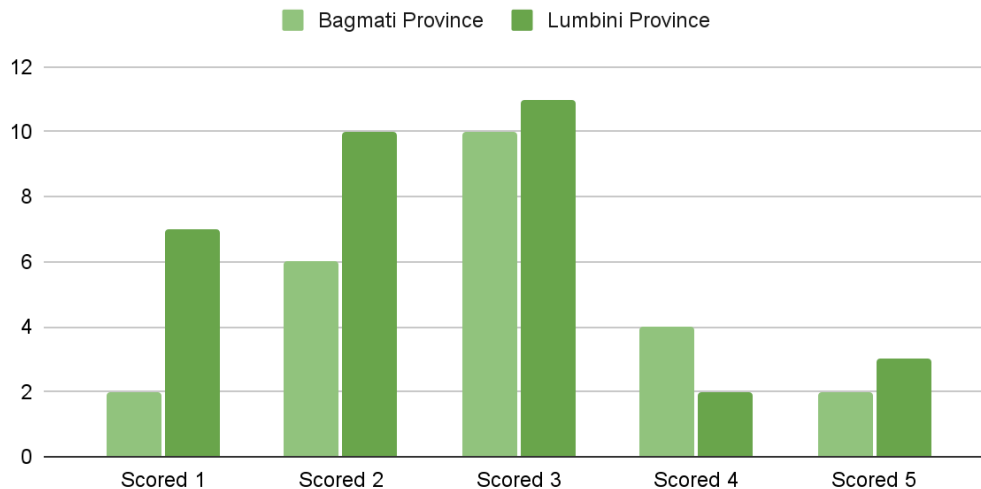
## **7.7. The Role of Education in Supporting Integration of Circular Economy in Nepal**

One of the findings from the field was that there is a dire need for the introduction of entrepreneurship courses within the education institutions of Nepal. Likewise, the informants have mentioned that entrepreneurship courses should be introduced in lower education grades than starting from colleges and university levels.

*“In schools, entrepreneurship courses should be introduced. It should be practiced from schools rather than starting from college or university level.”*

- **RO\_ROC\_LP35**

Figure 7: Universities and/or the academia are active in the field of social entrepreneurship.



*Note: 1 is the lowest score and 5 is the highest score*

Likewise, the data collected from the targeted Provinces shows that both Lumbini and Bagmati Provinces have scored 2 and 3 highest, which translates to that there is no specific effort from universities and/or the academia to promote social enterprises (refer Figure 7).

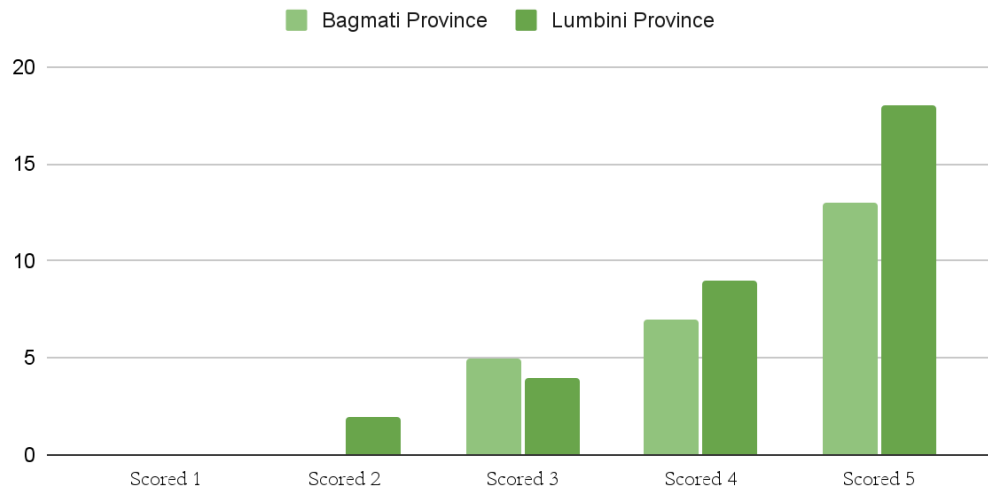
The informants mentioned that the effectiveness and the impact within the entrepreneur ecosystem can only be achieved if education institutions introduce such courses at the school level. Speaking from their experience the informants mentioned that if such curriculums are introduced at the university level, it is difficult for them to grasp a new concept but if they are introduced from a very young age they will be able to not just grasp it but also implement it later on in their careers.

***“Knowledge of incubation to be instilled is difficult from university level. The knowledge on incubation should be disseminated to the youth from the school level.”***

***- SS\_ROC\_LP34***

Likewise, the other finding was that if the education institutions collaborate with other ESOs and CSOs they are able to act as a catalyst for the youths to venture into their entrepreneurial journey. Likewise, it supports the educational institutions to provide them with knowledge and networking opportunities which will later support them in their entrepreneurial journey.

Figure 8: Education contributes to the development of positive attitudes towards social entrepreneurship.



*Note: 1 is the lowest score and 5 is the highest score*

In Figure 8, the informants from Bagmati and Lumbini Province have scored 5 the highest, which means that through formal education entrepreneurship can be promoted. As stated in the findings above the informants have mentioned that there is a dire need for integration of incubation and entrepreneurship courses within the school curriculum as it supports in shaping the mind as well as the larger entrepreneurial ecosystem for the aspiring entrepreneurs.

*“Talking about Lumbini Banijya Campus, we are working in collaboration with the University Grants Commission. This has supported us in selecting the students who aspire to be entrepreneurs and encouraging them to pursue their dream to become an entrepreneur. Connecting students who aspire to be entrepreneurs are connected with entrepreneurs who are able to share their knowledge and experiences.”*

*- TPU\_ROC\_LP09*

Also, educational institutions by inculcating entrepreneurship courses within their curriculums can support in establishing role models for the youths within their communities. These role models can support the students who aim to become entrepreneurs by sharing with them their experiences which further supports the aspiring entrepreneurs to navigate their businesses' risks and challenges.

*“Even among the batchmates only 5% of us are interested in entrepreneurship. That’s because we have seen many entrepreneurs not doing well in their business. And frankly speaking, we lack in having a role model in this field who is particularly based in Butwal. Even when we are preparing our business plans, what is this going to be and where will this business go are the kind of questions that we often ask ourselves.”*

*- PRG\_ROC\_LP12*

## 8. Analysis

The analysis section has been divided into two major sections which is based on the findings provided above, they are :

- a. Challenges and
- b. Opportunities

The analysis has been divided into challenges and opportunities as the analysis will support the development of the circularity tool kit, school curriculum and alliance. Hence, this section dwells more on identified challenges and areas of work for the RoC project for the coming years.

### 8.1. Challenges

- **Lack of support from government agencies:** As stated earlier there is a lack of support from all three tiers of government bodies. Apart from it it has been found that there is a lack of coordination within the layers of government itself which has impacted the development of the entrepreneur ecosystem of Nepal. Government plays an important role in creating policies which support entrepreneurs, according to Ellen Macarthur Foundation Government policy can have a major impact on the way that companies and citizens behave, and the choices they make. Using a wide variety of policy instruments – like circular public procurement and product labeling policies – governments can inform, incentivise and develop the market for circular products, services, and systems. Institutions, governments and cities play a crucial role in creating and enabling conditions for a circular economy to emerge and thrive. They set direction and they are drivers of innovation and investment (Ellen Macarthur Foundation, 2023).
- **Circular economy the need for Nepal's present economic situation:** According to the World Bank in fiscal year 2024 and 2025 Nepal will still face high inflations and there is a dire need of balancing policies to stimulate growth (World Bank, 2023). The grunt of this high inflation is faced by the start ups and MSEMs as they are not able to access financial support as well as their products and services cost will increase due to high tax on trade and imported goods. The circular economy provides a framework for governments and cities to realize many of their economic, environmental, and societal ambitions. Many different policy levers can be applied to accelerate the transition - from product policies that incentivise design for circularity, to laws aimed at restoring ecosystems and bringing biodiversity back into urban environments (Ellen Macarthur Foundation, 2021). Hence, if the entrepreneurs are able to integrate a circular business model moving here onwards they will be able to sustain their businesses and increase their productivity as their dependency on imported goods will decrease.
- **Access to finance and seed fund:** One of the major findings from the study was that entrepreneurs face challenges accessing finance and investment to sustain and integrate circular business models within their businesses. In the fiscal year budget 2080/2081 published by the Ministry of Finance they have allocated Rs. 1.25 billion fund to start-ups and establishment of start-up educational centers in Kathmandu. Furthermore, Venture capital and Private Equity Venture Capitals (PEVCs) will be actively encouraged to invest in startups (Start Up Law Advisor, 2023). Whereas one of the findings was that various schemes developed by the

government have been stopped due to governments incapability to pay back the banks. Likewise, there is no monitoring and follow up mechanism in place to monitor who is accessing the funds, as one of the findings was also that entrepreneurs who are passionate and motivated to venture into entrepreneurship are not able to access the allocated funds by the government since they are not able to collateral as well as due to lengthy documentation process.

- **Access to incubation programs and transferable knowledge:** As stated earlier the fiscal budget allocation for establishing start up educational centers are said to be based in Kathmandu. Whereas one of the findings stated that there is a dire need of educational centers focused on entrepreneurship and startups in the rural areas. Kathmandu is an urban space, where access to internet and technology is higher. According to the World Bank, as of 2022 the internet penetration rate was estimated to be around 54.8%, which means that 54.8% of the population has access to the internet. This disparity in access to technology creates a significant digital divide between rural and urban areas in Nepal. The lack of access to digital resources in rural communities hampers educational opportunities, limits economic prospects, and widens the gap between different regions and socio-economic groups. The digital divide in Nepal is not only limited to rural and urban disparities but also extends to marginalized communities, such as disadvantaged groups. These communities often face additional challenges related to language barriers, limited digital literacy, and inadequate infrastructure, further exacerbating the digital divide within the country. Hence, with the establishment of entrepreneur and startup educational centers in Kathmandu will be leading to stagnation of the entrepreneurial ecosystem, as the majority of the Kathmandu population have access to the internet, opportunities and programs such as incubation and skill development. But there is very little effort in the rural areas, they have very little access to learning and capacity building.
- **Lack of partnership and collaboration:** One of the other findings was that there is a lack of partnership and collaboration between government and private sectors within Nepal. Private sector has a role to play in contributing finance, technology, and innovation to accelerate the infrastructure development process for delivering quality, faster and cost effective and efficient public services. Engaging the private sector in infrastructure development allows the Government to leverage government funds to focus on social sectors (NPC, n.d.). Apart from infrastructure development joining hands with the private sector, the government will be able to capacitate government officials skills and capacities in terms of monitoring and evaluation. Likewise, it can support the overall development of Nepal's economy, as this partnership and collaboration can foster the establishment of larger investment plans and strategies for the start ups and entrepreneurs.
- **Lack of transparent policies and inclusive policy making process:** Apart from lack of government's active support in establishing the entrepreneurial ecosystem, one of the other findings was that entrepreneurs are not made part of the policy making process. Hence the policies devised lack the understanding of how startups and entrepreneurs function, their challenges and how the policies can be developed to support the entrepreneurial ecosystem.
- **Lack of support in innovation and technology:** One of the other findings was that there is a dire need of innovation and technology intervention within the entrepreneurial ecosystem but as much as there is a need for it there is very little information available on it. Entrepreneurship and innovation are closely related but distinct concepts. While innovation involves introducing something new, such as a business model, product, idea, or service, entrepreneurship focuses on

turning a great idea into a viable business opportunity. Innovation is the starting point for entrepreneurship, as it involves the creation of new and valuable ideas. However, entrepreneurship goes further by taking on the risk and responsibility of bringing those ideas to market and building a successful business. The key distinction lies in the risk component associated with entrepreneurship, which is not necessarily present in innovation alone (Dieffenbacher, 2023).

## 8.2. Opportunities

- **Contextualizing Circular Economy in Nepal:** As the majority of the informants have mentioned that they are aware of the concept of circular economy but the majority of them further mentioned that they are not fully aware of it as well. Also when going through the literature, there were no articles or documents related to the circular economy which focused on Nepal. Hence, one of the biggest opportunities for the RoC project is to contextualize the circular economy in Nepal and support in producing transferable knowledge highlighting the four years of experience in Nepal.
- **Generating knowledge and supporting entrepreneurs to integrate circular business model:** Since this is the first time in Nepal an entire project is focused on circular economy and more over-focused on business incubation of start-ups and MSMEs, through RoC project ample amount of knowledge can be generated which can be made accessible to the larger Nepali community. Also through the RoC project, existing businesses in Lumbini and Bagmati Province will be supported to develop their individual circular business models. Likewise, through implementation and experience ample information and knowledge such as best practices and success stories can be developed which puts Nepal on the map for a circular economy, which not just highlights the successes but the impact of the circular business model in the economy of Nepal.
- **Building of partnership and collaboration between private and public sector through alliance:** Since one of the major outputs of the project is to develop an alliance, this alliance can foster partnership and collaboration between the private and public sectors of Nepal. This will also support making the policy-making process transparent and inclusive in nature in the long run.
- **Access to seed funds:** Through RoC, 60 entrepreneurs from Bagmati and Lumbini Province will have access to seed funds which will support the entrepreneurs to integrate circular business ideas and also prototype their products. This will also support in reaching out to larger investments in the long run.
- **Development of startups and entrepreneurs education system:** From this project one of the major opportunities seen is to support the government's goal to establish educational centers in Bagmati and Lumbini Province. One of the outputs is to develop a curriculum that will be aimed at educational institutions of the selected provinces. This will support in development of the entrepreneurial ecosystem and also support rural entrepreneurs to pursue their dreams.
- **Access to innovation in entrepreneurship:** Since Impact Hub Kathmandu has a design fabrication lab embedded within the organization, the 60 entrepreneurs will have access to various technologies such as 3D printing, textile machines, plastic recycling machines, lasers, and CNCs among others. This will support the entrepreneurs to bring circular products into the markets, they will be able to gain first-hand knowledge and experience through the design fabrication process.

## 9. Conclusion

The Road to Circularity (RoC) project in Nepal is poised to address significant challenges while capitalizing on numerous opportunities in the realm of circular economy development.

Challenges such as the lack of government support, particularly in policy formulation and financial accessibility for entrepreneurs, pose hurdles to the establishment of a robust circular economy ecosystem. Moreover, the digital and rural-urban divide exacerbates disparities in access to resources and opportunities, hindering inclusive growth.

However, amidst these challenges lie ample opportunities. The RoC project stands at the forefront of contextualizing circular economy principles in Nepal, generating knowledge, and supporting entrepreneurs in integrating circular business models. By fostering partnerships between the public and private sectors through alliances, the project aims to promote transparent policy-making processes and create avenues for seed funding. Additionally, the project holds the potential to revolutionize the educational landscape by developing tailored curricula and educational centers, thereby nurturing a new generation of circular economy pioneers.

In essence, while challenges persist, the RoC project presents a beacon of hope, offering concrete pathways to overcome obstacles and unlock the transformative potential of the circular economy in Nepal's socio-economic fabric. Through concerted efforts and collaborative action, the project can pave the way for a sustainable and inclusive future, where innovation and entrepreneurship thrive for the betterment of society and the environment alike.

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### ANNEX I: Sector Wise Informants

S.N	Province	CSO	ESO	Private	Entrepreneur	Government	Academia
1	Bagmati	SKK_ROC_BP23	AG_ROC_BP1	SR_ROC_BP17	JS_ROC_BP8	HT_ROC_BP19	UK_ROC_BP21
		SJ_ROC_BP24	SS_ROC_BP2	SS3_ROC_BP18	PP_ROC_BP9	IBJ_ROC_BP20	PB2_ROC_BP22
			RG_ROC_BP3		AS_ROC_BP10		
			NM_ROC_BP4		SS1_ROC_BP11		
			SA_ROC_BP25		SS2_ROC_BP12		
					BB_ROC_BP13		
					RK_ROC_BP14		
					YR_ROC_BP15		
					RM_ROC_BP16		
2	Lumbini	SMS_ROC_LP18		TS_ROC_LP08	FRU_ROC_LP01		TPU_ROC_LP09
		TB_ROC_LP19			JBB_ROC_LP02		DRU_ROC_LP10
		PP_ROC_LP20			BKS_ROC_LP03		SS_ROC_LP11
		MA_ROC_LP21			RD_ROC_LP04		PRG_ROC_LP12
		AD_ROC_LP22			RM_ROC_LP05		BK_ROC_LP13
		HPA_ROC_LP23			SR_ROC_LP06		KP_ROC_LP14
		UK_ROC_LP24			DS_ROC_LP07		KK_ROC_LP15
		MKK_ROC_LP25					YM_ROC_LP16
		TP_ROC_LP26					AA_ROC_LP17
		KD_ROC_LP27					
		BG_ROC_LP28					
		UA_ROC_LP29					
		SB_ROC_LP30					
		TPG_ROC_LP31					
		BRB_ROC_LP32					
		KN_ROC_LP33					
SS_ROC_LP34							
RO_ROC_LP35							

*Note: The information presented here is encoded in a format commonly used by informants to ensure the preservation of their privacy and confidentiality.*

### For Private Sector

S.no.	Question
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>How do you think circular economy will support the entrepreneurial ecosystem?</i>
5	<i>What systems (physical and thought processes) are required for circular economy?</i>
6	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
7	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
8	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
9	<i>Who supported you and your business? How?</i>
10	<i>What inspired you to become an entrepreneur?</i>
11	<i>What were the challenges? Are the challenges different from before? (If yes, how?)</i>
12	<i>Are you associated with any alliance, clubs and groups? Has those groups, clubs and alliances supported you and your business? How?</i>
13	<i>How do you think networks support in building a circular economy?</i>
14	<i>The major component of this project is to be able to contextualize a toolkit in a circular economy. How do you think one can introduce it and give training to the larger community?</i>
15	<i>While introducing and integrating circular economy, how does an economy become resilient by just depending on their own local brands?</i>
16	<i>Adding to the previous question, how to bridge the gap between the understanding of circular economy among the local brands and those national brands that are trying to go international?</i>
17	<i>How can we brand circular economy in business?</i>
18	<i>Is there any governmental support regarding the circular economy to the private sectors?</i>
19	<i>Do you think that there is a lack of policies for different private industries involving relevant stakeholders?</i>

### For Entrepreneurs

S.no.	Question
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>Who supported you and your business? How? What inspired you to become an entrepreneur?</i>
5	<i>What were the challenges? Are the challenges different from before? (If yes, how?)</i>

6	<i>When you decided to become an entrepreneur, how did your family and external community react to it?</i>
7	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
8	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
9	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
10	<i>Are you associated with any alliance, clubs and groups? Has those groups, clubs and alliances supported you and your business? How?</i>
11	<i>How do you think networks support in building a circular economy?</i>
12	<i>Are there regular events in the municipality that connect different stakeholders? Do they participate?</i>
13	<i>Do they collaborate with other entrepreneurs in business?</i>
14	<i>Are you aware of any government schemes aimed at women entrepreneurs and have you tried to access them?</i>
15	<i>While applying for a loan, was the process easy for you? What was difficult for you? Did anyone support you while applying for the loan?</i>
16	<i>Is access to finance easy for entrepreneurs? Especially to women and marginalized communities? If not, what are the reasons?</i>
17	<i>Have you gotten any training on circular economy? How can banks and financial institutions play a role in establishing a circular economy? Do you think the circular economy is important?</i>
18	<i>How do you think circular economy will support the entrepreneurial ecosystem?</i>

#### For Academia

S.no.	Questions
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>How do you think circular economy will support the entrepreneurial ecosystem?</i>
5	<i>What systems (physical and thought processes) are required for circular economy?</i>
6	<i>In your opinion, how can education support introducing the concept of circular economy?</i>
7	<i>Adding to this, through education how can we build the sense of importance of being an entrepreneur and build the entrepreneur ecosystem</i>
8	<i>How important do you think is circular economy for the entrepreneurial ecosystem and starting with aspiring students</i>
9	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
10	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
11	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
12	<i>What are the challenges of introducing the concept of circular economy? And how can we tackle it?</i>
13	<i>Are you associated with any alliance, clubs and groups? Has those groups, clubs and alliances supported you and your institution? How?</i>

14	<i>How do you think networks support in building a circular economy?</i>
15	<i>The major component of this project is to be able to contextualize a toolkit in a circular economy. How do you think one can introduce it and give training to the larger community?</i>
16	<i>In terms of policy, where is the challenge and the political gaps and where do you think needs more focus at a policy level to support the entrepreneurial ecosystem?</i>
17	<i>Policies do support entrepreneurs but if you are aware, in terms of Nepal's policy for entrepreneurs who is making for whom? And how can entrepreneurs grow in that ecosystem?</i>

### For CSO

S.no.	Question
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>How do you think a circular economy will support the entrepreneurial ecosystem?</i>
5	<i>What systems (physical and thought processes) are required for a circular economy?</i>
6	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
7	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
8	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
9	<i>How well do you know the elected representatives? Did the candidates focus on their circular economy agenda while campaigning ?</i>
10	<i>Do you know of any government programs which focus on the circular economy? If yes, how did you hear about it? and what policy do you know? If not, what is the reason for not knowing it?</i>
11	<i>The major component of this project is to be able to contextualize a toolkit in a circular economy. How do you think one can introduce it and give training to the larger community?</i>
12	<i>While introducing and integrating circular economy, how does an economy become resilient by just depending on their own local brands?</i>
13	<i>Adding to the previous question, how to bridge the gap between the understanding of circular economy among the local brands and those national brands that are trying to go international?</i>
14	<i>How can we brand circular economy in business?</i>
15	<i>Is there any governmental support regarding the circular economy to the private sectors?</i>
16	<i>Do you think that there is a lack of policies for different private industries involving relevant stakeholders?</i>
17	<i>What role can CSO play in introducing and integrating the concept of circular economy to the larger community?</i>
18	<i>Adding to the previous question, what challenges are there regarding this and how can we overcome it?</i>

### For ESO

S.no.	Question
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>How do you think a circular economy will support the entrepreneurial ecosystem?</i>
5	<i>What systems (physical and thought processes) are required for a circular economy?</i>
6	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
7	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
8	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
9	<i>How well do you know the elected representatives? Did the candidates focus on their circular economy agenda while campaigning ?</i>
10	<i>Do you know of any government programs which focus on the circular economy? If yes, how did you hear about it? and what policy do you know? If not, what is the reason for not knowing it?</i>
11	<i>The major component of this project is to be able to contextualize a toolkit in a circular economy. How do you think one can introduce it and give training to the larger community?</i>
12	<i>While introducing and integrating a circular economy, how does an economy become resilient by just depending on their own local brands?</i>
13	<i>Adding to the previous question, how to bridge the gap between the understanding of circular economy among the local brands and those national brands that are trying to go international?</i>
14	<i>How can we brand circular economy in business?</i>
15	<i>Is there any governmental support regarding the circular economy to the private sectors?</i>
16	<i>Do you think that there is a lack of policies for different private industries involving relevant stakeholders?</i>

### For Policy makers/Government

S.no.	Question
1	<i>Are you aware of the word circular economy?</i>
2	<i>If yes, can you explain to me what it means to you?</i>
3	<i>Where did you hear about this word or the concept?</i>
4	<i>How do you think a circular economy will support the entrepreneurial ecosystem?</i>
5	<i>Are there any specific laws and policies established in your municipality which support entrepreneurs? If yes, can you provide us the details?</i>

6	<i>What kind of programs have been planned to encourage and support the entrepreneurs? How are you relaying this information? Are the programs focused on circular economy as well?</i>
7	<i>How well do you know the elected representatives? Did the candidates focus on their circular economy agenda while campaigning ?</i>
8	<i>What are the challenges faced by the government to support entrepreneurs ?</i>
9	<i>Do you know of any government programs which focus on the circular economy? If yes, how did you hear about it? and what policy do you know? If not, what is the reason for not knowing it?</i>
10	<i>Are there regular events in the municipality that connect different stakeholders? Do they participate?</i>
11	<i>Do they collaborate with other entrepreneurs in business?</i>
12	<i>Have you taken training? Who supported the training? How did you hear about the training?</i>
13	<i>What kind of training has been provided within your municipality? Are they useful?</i>
14	<i>What other kind of training is required for entrepreneurs which will help you grow your business and support you further to grow as an entrepreneur?</i>
15	<i>Do you think training and workshops on circular economy will help build an entrepreneur ecosystem? how?</i>
16	<i>Do you know which banks and cooperatives are providing loans to entrepreneurs? From where did you hear about it?</i>
17	<i>Are you aware of any government schemes aimed at women entrepreneurs and have you tried to access them?</i>
18	<i>While applying for a loan, was the process easy for you? What was difficult for you? Did anyone support you while applying for the loan?</i>
19	<i>Is access to finance easy for entrepreneurs ? Especially to women and marginalized communities? If not, what are the reasons ?</i>