Initiation of Statistical Business Register in Nepal: Status, Challenges and Prospects in reaching maturity model

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Abstract

Statistical Business Register (SBR) is a prerequisite infrastructure for the development of robust economic statistics in national statistical system. Keeping in view the usefulness, reliability, coverage and availability of the statistics produced within the statistical Statistics System, it is imperative to have Statistical Business Register in Nepal. The then Central Bureau of Statistics of Nepal (now it is named National Statistics Office-NSO) initiated in setting statistical business register of the country after the institutional unit established within bureau in 2014 for conducting economic census and establish statistical business register. The bureau conducted economic census of the country for the first time covering 18 sections of international standard industrial classification (ISIC revision 4). It executed 923,356 establishments which constituted about half of the establishment unregistered. The census result has been assumed as a benchmark of statistical business register. The primary purpose of establishing SBR is to provide frames for different surveys of business activities and generating basic economic statistics in sustainable way.

NSO Nepal has been collecting information of the registered establishments via district level statistics offices approaching to different authoritative registration offices. SBR is being developed mainly from different sources like Economic Census and administrative data sources. Although the NSO has initiated in setting statistical business register, a number of challenges have been faced while accessing and collecting information required for the SBR of Nepal. Some of the challenges are heterogeneity of record keeping system at various administrative registration offices, multi-door system of registration of establishments, data sharing constraints to NSO, absence of data sharing legislations and culture, low level of statistical literacy, absence of unique identifier of establishments, checking duplication and operational status, coordination and cooperation.

Despite the many challenges in acquiring and maintaining SBR, there exists some prospects as well for setting SBR in Nepal. First of all, NSO has economic census section as institutional unit having task to develop statistical business register. This can be

considered as a primary requirement in proceeding SBR development process. Economic Census 2018 has provided benchmark information required for establishing SBR in Nepal. The frame from Economic census 2018 has been utilized for conducting sectoral surveys like industrial survey, trade survey and rebasing of national account statistics. Budget has been allocated to statistics offices for training and data collection for SBR. A prototype CSPro- based application program has been developed to integrate data from statistics offices. Recently, statistics act 2022 has been promulgated which mandates national statistics office to acquire the administrative data sources for the purpose of data integration. Some human resources are made trained about role of SBR and information collection, compilation procedure for SBR. It is learnt that administrative data sources of registered establishments have to be strengthened to be fully functional of the SBR development process. With the perspective of maturity level, the current SBR development process of Nepal can be assumed to be at early stage. In future, there is a scope of improved statistical business registers system in Nepal.

Introduction

Nepal is Democratic Republic country of the south Asian region located in between 26° 22' to 30° 27' North latitude and 80° 4' to 88° 12' East longitude. The country is administratively divided into 7 provinces and 77 districts constituting 753 local levels. The population of Nepal was 29.9 million with 6.6 million households according to Population Census 2021. The constitution of Nepal envisages the provision of central, provincial and local level statistical framework. In the context of growing data demands at the national and international level, and with the perspectives of evidence-based decision making in the various development activities, an existing statistical law 1958 has been replaced with new statistical law in 2022 in creating advance national statistical system in compliance with fulfilling the growing data needs.

National Statistics Office (NSO) has been recently established as per new statistical law with the upgradation of the then Central Bureau of Statistics (CBS) under Office of Prime Minister and Ministerial Council. NSO is the leading agency of the Government of Nepal (GoN) responsible in the collection, consolidation, publication and analysis of the statistics. The present statistical system is a defacto decentralized set up with the NSO as the major statistical agency. The major responsibility of NSO is to produce required statistics of social, economic and other sectors for the Government of Nepal for the policy and plan formulation and other users as well. NSO and different government agencies collect, compile and disseminate official statistics in Nepal. Sources of official statistics are census, surveys, administrative records. NSO undertakes the regular statistical activities along with compiling National Accounts Statistics, Price statistics and other official statistics following the international standard guidelines.

NSO constitutes four divisions namely Economic Statistics, Social Statistics, National Accounts and Planning and Human Resources Management. Economic Census Section is one of the units under Economic Statistics division, established at the end of 2013 year with the major three functions namely establish statistical business register, conduct economic census and conduct surveys on informal economic sectors.

A Statistical Business Register (SBR) is a comprehensive and up-to-date database containing information about businesses and economic units within a country. It plays a crucial role in providing accurate and reliable data frame for conducting a regular statistical surveys and other basic economic data. Nepal, like many other countries, has embarked on the journey of establishing and developing its own SBR. This article portrays into the current status of the initiation of the Statistical Business Register in Nepal, the challenges faced, and the prospects for reaching a maturity model.

Initiation of Statistical Business Register in Nepal

The role of the business sector engaged in economic activities is more significant in any economy of the country. Such kinds of diverse economic activities have major contributing role in gross domestic product of the country. Other major significant role played in Nepalese economy is based mostly on the own account informal or unorganized sectors.

Even though the formal statistical business register did not exist for a long time in Nepal, statistical reports containing economic statistics of various industry sectors have been produced since the past by obtaining data from various administrative sources or collecting data from field level listing of economic units and conducting surveys. With the rapid development era and information technology, the scope of economic activities is also widening. The responsibility of the National Statistics Agency has been increased to meet the growing demand for economic statistics. If we look at history, Realizing the responsibility to fulfill growing economic data demand, the then Central Bureau of Statistics (CBS) of Nepal had initiated the effort of statistical business directory survey in around 1997/1998 to develop a complete list of business frames of the establishments or enterprises operated in the country. This effort could not be succeeded due to various reasons, one of the reasons was absence of designated institutional unit in the bureau.

However, a regular update database system of economic units has been realized to be developed to establish a statistical business register of the business establishments or enterprises. Mainly the responsibility to establish the statistical business register lies with the national statistics office (NSO). The increasing data demand on various economic aspects at national and international level made change of the then CBS organization structure, on which Economic Census Section was established in the end of 2013. As the Economic Census Section was established in the institutional set up of CBS in 2013, the responsibility to establish statistical business register and conduct economic census has been instituted with this section. The then Bureau again made efforts of conducting statistical activities of statistical business register and conducting Economic Census of Nepal in 2018 for the first time in Nepal despite the limitations on different capacity and resources.

The then CBS started a statistical business register survey as a trial survey in the fiscal year 2014/2015 with the long term aim to establish a strong and updated Nepal Statistical Business Register System in Nepal. CBS with limited knowledge capacity and resources started the survey of Statistical Business Register as a provisional statistical work in some selected three districts namely Dolakha, Palpa and Dang in Fiscal year 2014/15. Provisional data collection work was

continued for selected 14 districts in subsequent years till before the year of Economic Census 2018. Such work was also basis for gaining knowledge in conducting economic census. One of the objectives of undertaking provisional SBR survey was also to study the status of various economic units operated in the country and develop a methodology to permanently establish SBR and the established SBR could be updated annually in each statistical office. The data collection work in these districts gave some lessons, feedback and status of economic units operated in the enumeration districts. The major steps in this survey were operated in two phases mainly list collection from the authorized local registration office and collecting detail information of each establishment or business firms. Following this step gave knowledge that not all registered units could be found at the address and operated. However, the second phase of provisional survey was like the census. After the economic census in 2018 (It will be discussed later), only list collection has been undertaken from registration offices. The experience obtained from this survey has given some issues, challenges and way forwards in establishing a strengthened and updated statistical business register system in Nepal.

The need of statistical information on economic units (establishments) engaged in formal or informal sectors in Nepal was realized in the context of growing data demand on economic sectors in global economy. NSO has been continued program of Statistical Business Register in its annual fiscal year program via its statistics offices at districts.

Objective of Nepal Statistical Business Register

Overall objective of Nepal Statistical Business Register is to develop a standardized list of the economic units (establishments) formally registered in the authorized agencies in the reference fiscal year which contains standardized descriptions of the establishments required to be used as statistical purpose. Especially the following are the thematic objectives to develop SBR:

- To establish statistical infrastructure as a basis for the operation of economic surveys in the country
- To provide a sample frame for statistical surveys
- To provide the required statistics for the business demographic analysis
- To provide a basic statistic for the support of estimating national accounts
- To present the structural status of the economy
- To establish a regular job of statistical offices for updating and maintaining SBR

Scope and coverage of the Nepal Statistical Business Register

The program of Nepal Statistical Business Register covers the entire country regularly covering the establishments or enterprises registered, located or operated in entire country. The establishments contained in SBR are under the scope of International Standard Industrial Classification revision 4.

Update of SBR

The Statistics offices are tasked for the acquisition of information on establishments registered at district level offices under the territory of statistics offices every year and send to NSO at center. Initially the data collected were made entry in simple predesigned format of excel. Now, and advanced software application based on CSPRO has been developed and distributed for each SO at district.

Output of SBR

The major outputs of the Statistical Business Register of Nepal in future will be to generate a live register as well as frozen register of different ISIC sectors and institutional sector. It is expected to provide complete list of enterprises or establishments operated in formal economy. Also, it is expected to provide frame for different economic surveys as well as for economic census. Likewise, SBR will provide some basic economic statistics like number enterprises or establishments and employment status. Further, it is expected to make business demographic analysis in future.

Context of Economic Census of Nepal

Economic census is the data collection, data processing, analysis and dissemination of enterprises or establishments carrying different economic activities as defined by International Standards Industrial Classification (ISIC) covering partial or complete ISIC sections within country territory in regular interval of time. It is the part of an integrated approach to compilation of economic statistics. The integrated approach of compilation includes censuses for specific activities/industries like agriculture or manufacturing, surveys, business registers and administrative data sources including its provision at regular intervals at national and local levels. Main uses of economic census are to provide fundamental economic statistics on the current status of the business activities of the establishments and enterprises at the national as well as local level for policy-making and supporting to enhance the System of National Account including academic researchers' and other users' need for their own study. The census is one of the major

sources for feeding data for statistical business register in the countries like Nepal. The directories of establishments and enterprises for the sampling frame of various sample surveys on business is the other main use of this census in the absence of SBR.

CBS conducted national economic census in 2018 for the first time covering mostly all economic activities categorized in ISIC of the same period of time. This is the census of business frame which is further used to collect information on business activities via various thematic surveys like industry survey, distributive trade survey etc. The key objective of the Economic Census of Nepal was to comprehend the economic structure comprised with diverse sector of economic activities and provide comprehensive statistical information for users. The basic objectives of the census were providing statistics up to local governments for the plan and policy-making; support national accounting system; support to create statistical business register and develop sample frames; and provide statistics of associated sectors to the business community, researchers and other statistics users for planning the prosperity of their business.

The scope of the economic census is based on the Nepal Standard Industrial Classification (NSIC) which was prepared on the reference of ISIC revision 4. All the establishments engaged in non-agriculture economic activities and registered establishments of agriculture, forestry and fishery economic activities, except Section-O (Public administration and defense; compulsory social security), Section-T (Activities of households as employers; undifferentiated goods- and services- producing activities of households for own use) and Section-U (Activities of extraterritorial organizations and bodies), were included in the scope of Economic Census of Nepal. Geographically, the Economic Census covered the entire country, that is, 753 Local levels under 77 district and seven provinces.

The establishment was the basic enumeration unit in the economic census which is an economic unit that engages, under a single ownership or control - that is, under a single legal entity - in one, or predominantly one, kind of economic activity at a single physical location. The enumeration period of the census was two months from 14 April to 14 June 2018. The modality of data collection namely Paper and Pencil Interview (PAPI), Computer Assisted Personal Interview (CAPI) and Computer Assisted Web Interview (CAWI) or online census were employed in the census. The census collected the information from the 923,356 establishments in Nepal, out of which 89.84 % was collected from PAPI, followed by 9.52 % CAPI and 0.64 % CAWI methods. CAWI method was the first time introduced in Nepal.

The Economic Census of Nepal provided voluminous information pertaining to establishments with different characteristics like distribution of number, registration status, employments, business nature etc. The economic census of Nepal resulted a total of 923,356 establishments engaging a total of 32,28,457 persons in diverse economic activities categorized under ISIC sections. The figure 1 shows the sectoral representation of establishments from the economic census 2018 result of Nepal.

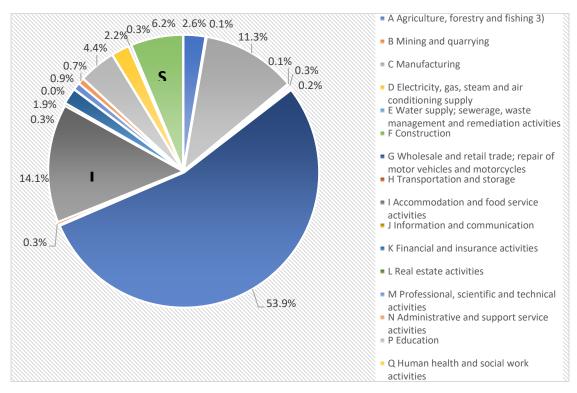


Figure 1 Sectoral Composition of Establishments in NEC 2018 of Nepal

The census results revealed some of the interesting facts that about half of total establishments enumerated were in operating without registration in any government agencies. It means about 49.9 percent of total establishments were not registered. This is a first official figure on the size of not registered establishments operating in the country. However, economic census 2018 is the the first comprehensive frame data of establishments covering most economic activities sectors. This data frame has been utilized for rebasing workout of national accounts statistics of Nepal and in generating provincial gross domestic products of Nepal, integrated industrial survey (ISIC sections B, C, D, E), Distributive trade surveys (ISIC Section G) Real Estate survey (Section L) and other studies. However, data frame of economic census 2018 has been considered as the benchmark of Nepal Statistical Business Register although it exhibits some

constraints like absence of unique id to be merged with same establishment from administrative source.

Rationale of Statistical Business Register in Nepal

The need for Statistical Business Register (SBR) and their importance in the creation of economic data has increased along with the demand for better and more thorough economic statistics. This is a permanent and dynamic statistical database of all the establishments that serves as the sample framework for producing benchmark economic indicators on a quarterly or annual basis and for conducting any topical economic surveys. Its advantage is that by avoiding the procedure of listing establishments in each cycle, it will lower the cost of any censuses or surveys. The main goal of the SBR, then, is to offer a sample frame for business statistics. It is an essential component of statistical infrastructure. The SBR of today frequently require further information to produce economic statistics.

In Nepal, censuses and large -scale statistical surveys of different industry sectors have been conducted in different years and cycles. It was not practiced produced comprehensive industrial structural statistics, which cover all industries (economic activities) of Nepal at the same point of time. The Establishment and Enterprise Census (more than 10 persons engaged) has been mostly conducted in Nepal every five years. However, its aim is to investigate the accounting aspects of economic activities. But there did not exist for a long time a comprehensive statistical activity on data integration mainly to compile a list of all establishments and enterprises to produce a national sampling frame, and to produce various economic statistics based on the comprehensive frame of the the establishments. Therefore, the development of statistics capable of grasping all the economic activities of Nepal comprehensively at a single reference time was a critical issue. The Economic Census 2018 has resolved to some extent, fulfilling the basic data on the characteristics of establishments at the same point in time. However, the data generated from the economic census may not be entire economic data sources. Rather, there needs to establish a system for the integration of various administrative data sources on establishments or enterprises covering most of ISIC sections with census and survey data sources for institutionalizing the sustainable data sources to produce different dimension of quality economic statistics in cost efficient way. The only way to achieve this goal was to establish the Nepal Statistical Business Register System with coordination and cooperation of different registering authorities like Office of Company Registrar, Department of Industry, Department of Commerce, Local Governments, Department of Inland Revenue office and similar authorities in sustainable way.

Ideally the Business Register is exhaustive and should include all enterprises and establishments. Due to the presence of vast informal sector, in the initial effort, units registered under the prevailing acts and regulation to different government authorities, priority has been set basically to form the Business Register of formal registered business units. With international practice and principle, National statistics offices have a liability to lead to establish statistical business register with the coordination and cooperation of other registering authorities. At present, the NSO has realized to develop the further capacity strengthening of NSO for establishing the Nepal Statistical Business Register, which in turn will be sustainable and cost-efficient data source of economic statistics of Nepal.

Present Status of SBR in Nepal

Nepal's effort to establish a robust Statistical Business Register has gained momentum after National Economic Census 2018 with the adoption of a federal structure in 2015. National Statistics Office (the then Central Bureau of Statistics) of Nepal has taken the lead in the establishment of the SBR.

As of now, Nepal has made significant progress in initiating the SBR. Key milestones include the development of legal frameworks, data collection methodologies, and IT infrastructure. The registration of businesses and the collection of data have been ongoing, contributing to the growth of the SBR. Collaboration with various government agencies at district and local level has also been instrumental in the initiation phase.

After the economic census 2018, from the fiscal 2019-20, the operation of the statistical business register was expanded in all 33 statistics office to cover 77 districts, for which training was provided on procedure to data collection for SBR from authoritative offices at districts. But since the third quarter of this fiscal year, the global corona virus outbreak also affected this work, so it could not be effective in collecting business details. This was also affected for next fiscal year

202021 due to COVID pandemic and due to the engagement of the officials for twelfth Population Census of Nepal in 2021. However, the officials of statistics offices were again trained for data collection, data entry via new software application in FY 2021/22. From this FY 2021/22 details of business units were collected from the districts under their respective regions from many data offices. At present, since the FY 2022/23, the work of collecting the details of the business units registered at the district administrative bodies and the local level governments has been resumed.

In the future, it has been visualized to integrate the business units in the administrative records at the central administrative bodies like data of company registrar into the Nepal Statistical Business Register. For this, National Statistics Office will initiate to develop policy arrangements in the near future with the dialogue with concerned central level administrative agencies who maintain database of business units for administrative purpose.

Contents of Statistical Business Register

While collecting information for SBR at districts, the information is collected for business units newly registered, renewed, migrated, and business closed. The information has to be collected annually from the local level offices and district registration offices. Collection of data means either transcribing from the physical book records or copy digital data. A standard data collection form has been developed with key details which are as following:

- Date of data collection, Name of District and district code, Fiscal Year for data collected, Name of Authorized Office from where data collected, Registration Status (New, Renewal, Migrated, Closed)
- Name of Establishment/enterprise
- Registration number in concerned office
- Nature of establishment (production base, Energy related, Agriculture and Forestry related, Mining and quarrying, Tourism, Service, Others (to be specified)
- Legal Status of Registered Establishment (Private, Partnership, Private Limited Company, Public Limited Company, Others)
- Address where Establishment located (District, Local Level, Ward, Name of Settlement)
- Telephone or Mobile Number of establishments
- Name of main proprietor of the establishment
- Number of persons engaged in the establishment
- Total Capital (sum of current and fixed capital)
- Main economic activity

Nepal Standard Industrial Classification Code (based on ISIC)

Data Entry Application and Synchronization

Statistics Offices collect and compile the data of establishments engaged in various economic activities as defined by ISIC annually. Such data may be collected in different formats because administrative record keeping system is also not uniform among different registration or record keeping bodies. Hence, an application base on CSPro 7.7.1 software has been developed to make consistent management of data collected either in paper form or digital data form in different formats. The application has been named as Nepal Statistical Business Register -NSBR application. This application has been developed for data entry, import digital data, data management and data synchronization or data upload to administrator in NSO. The data dictionary contains the variables as enquired in NSBR paper questionnaire format. This software application supports in managing the newly entered data as well as stored previous data as well. Concerning Statistics Offices have been distributed and trained about this NSBR application. An interface has been in Nepali language.

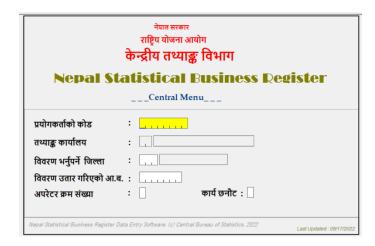


Figure 2 Interface of NSBR application

NSBR Manual in Nepali Language

A NSBR manual in Nepali language has been drafted for imparting knowledge on concept, definition on SBR, Data collection and compilation methods and data entry in the application. The manual is composed of four sections namely: General concept of Statistical Business Register, SBR in Nepal, Data Contents of NSBR, NSBR Data Entry Application. The manual has been drafted with the aim to provide general knowledge on SBR to wide users and methodology of data

collection and compilation with step wise instructions for data collectors and compilers /users within NSO. The concerned statistics offices have been provided with draft NSBR manual.

Context of Legal Provisions for Registration of Business Entities

In order to operate a business in any country, there exist provisions to be registered or licensed according to the nature of the business in the bodies specified by the law. Even in Nepal, there are provisions to obtain registration, renewal or permission from various bodies specified by the law in order to operate businesses of various natures. In order to build or organize a statistical business register system, mandatory coordination or cooperation mechanism is essential with the agencies specified by the respective laws. Some major laws that provision the registration of businesses are Company Act 2007, Industrial Enterprise Act 2019, Local Government Act 2017, Institution Registration Act 1977, Private Firm Registration Act 1957, Bank and Financial Institution Act 2016, Cooperative Act 2017, Partnership Act 1963, Inland Revenue Act. Under different provisions of these laws, business entity of different ISIC sectors needs to register as per prevailing laws for different purpose. Such entities are also registered in multi agencies with different purposes. For example, an entity registered under Company Act also need to register in inland revenue office as well as at the local government where entity is operated. There seems also multidoor system of registration which is much challenging for making a robust SBR database avoiding duplication and making update of these business units regularly.

Examining the NSBR in SBR maturity model.

It is known that the SBR is the backbone for producing economic statistics that meet the increasing demand for better integrated, coherent and comparable statistics across countries and statistical domains. A comprehensive SBR is more important part of the statistical infrastructure for maintaining the relevance, responsiveness and quality of economic statistics in order to measure the structure and dynamics of economic activity. In the current era of information technology, efforts on statistical production, particularly for economic statistics, should be modernized and use administrative data to reduce survey or respondent burden, to redesign the conventional survey systems, to comprehensively link administrative data and surveys data sources, and to work closely with administration authorities continuously to improve the quality of SBR. The SBR should deliver the basic frame information for conducting economic surveys by providing the sample frame, that is, populations of statistical units and their characteristics. Further, a spine data model should be the future SBR system with linkage to other datasets which requires at a minimum, unique identifiers to combine data, at the national level and ideally the international level.

The current state of an SBR and associated development differs across countries. Different countries are at different maturity level of different dimensions of SBR. The maturity model describes the different levels of an SBR by a number of dimensions. The Development of SBR progress from 'Preliminary', to 'Early', 'Mature' and finally 'Advanced' stages. Maturity model is useful tool in examining the progress of SBR in the country assessing with different dimensions. The dimensions of SBR maturity model are Legal and institutional framework; Data sources for the SBR; Maintenance and update of the SBR; Coverage of the SBR; Use of SBR; IT Environment and Interoperability. The Status of SBR of Nepal progress has been examined in the table 2.

Table 1: Capability Maturity Model (CMM) overview of the stages of each dimension

SN	Stages	Description
	Preliminary	"It is characteristic of processes at this level that they are (typically) undocumented and in a state of dynamic change, tending to be driven in an ad hoc, uncontrolled and reactive manner by users or events. "
	Early	"It is characteristic of processes at this level that there are sets of defined and documented standard processes established and subject to some degree of improvement over time."
	Mature	"It is characteristic of processes at this level that, using process metrics, effective achievement of the process objectives can be evidenced across a range of operational conditions. The suitability of the process in multiple environments has been tested and the process refined and adapted."
	Advanced	"It is a characteristic of processes at this level that the focus is on continually improving process performance through both incremental and innovative technological changes/improvements."

Source: Statistical Business Register Maturity Model - DRAFT

Table 2: Status of SBR of Nepal in the Maturity Model Framework

SN	Dimensions/	Levels/ Stages				Remarks
		Preliminary	Early	Mature	Advanced	
1	Legal and Institutional		Statistical Act 1958 did not	Statistical Act 2022.		Statistical Regulations and
	Arrangement		mention explicitly access to	This act has mentioned		Directives under the process of
			administrative data sources	for the access of		development
			however Statistical regulations	administrative data		
			1984 was indicative in regards	sources that need to be		
			to establish permanent	integrated to form a part		
			database.	of National Statistical		
				System.		
2	Data sources for		Currently Economic Census			In future, there is a vision to
	the SBR		2018, SBR data collected from			integrate data from other
			administrative sources of			administrative sources like Data
			registrations government			from Company Registrar,
			agencies at district and local			Department of Industry, Inland
			levels. However unique identifier			revenue Department and other
			is yet to be developed for data			admin sources after statistical
			linkage with different data			regulations be formulated. This
			sources.			applies similarly to other surveys
						as well.
3	Maintenance and	Data on new, renewal,				The data are not verified with
	update of the SBR	migrated and closed				data of same entity collected
		business entities have				earlier from same source or
		been continuously				others. Update means collecting
		collected. But duplication				predesigned information of newly
		and update mechanism				registered or renewed or
		are at infancy stage.				migrated or closed business
						entities only

						Remarks
		Preliminary	Early	Mature	Advanced	
4	Coverage of		The data from economic census covers about 18			ISIC Section A (unregistered),
1	the SBR		ISIC sectors both registered as well as			Section O, Section T and U are not
			unregistered business entities. It covers all			covered from economic census
			geographic coverage.			2018. While the data sources from
			SBR data collection covers the business entities			administrative sources only covers
			according to prevailing laws.			entities of formal economy.
5	Use of SBR		The database of Economic Census has been			Statistical regulation and directives
			utilized for some major surveys internally by NSO.			will address data distribution policy
			Due to non-existence of comprehensive data			which may address the access of
			distribution policy, individual data has not been			microdata or designated users.
			shared with agencies out of NSO.			SBR data use plan is yet to be
			The data collected from SBR are only compiled in			developed.
			the database only and is not ready for use.			
6	IT Environment		IT environment exists at NSO as well as at			The application further needs to be
			statistics offices. Data entry and synchronization			progressed with the aspect of data
			software for SBR has been developed in recent			maintenance, update and
			years and implemented in respective statistics			dissemination of SBR further.
			offices. The data is received at central server. The			
			data is stored in csv format and also can be			
			stored in other formats as well.			
7	Interoperability	SBR data is at preliminary				Such system will exist if there is
		stage to communicate and				integration of information system
		exchange standardized data.				outside NSO in future.
		Such system has not been				
		developed due to capacity				
		constraint.				

Challenges of SBR in Nepal

In order to strengthen the statistical system in Nepal, various statistical programs have been undertaken in different previous time period. Statistical infrastructures are essential to be established and operated in automation for strengthening the statistical system. In terms of production of economic statistics, basic statistical infrastructure is the establishment and operation of the statistical business register. In this regard, the National Statistics Office of Nepal has initiated in establishing Nepal Statistical Business Register along with the operation of the National Economic Census 2018. Although the SBR provides a basis for the production of various economic data, it has the following various challenges at present.

1. Non-Existence of Clear Directive for developing SBR in Prevailing Legislation

The then Statistical Act 1958 or Statistical Act 2022 does not mention clearly about the provision of statistical business register. However, it is mentioned that the statistical authority can ask for necessary details from individuals or organizations for statistical purposes and that details should be made available. Because of non-existence of distinct policy on SBR in the prevailing statistical laws made difficulties in accessing the data (mainly at central level) for building SBR.

2. Multi-Entity Business Registration and Duplication Issue

A number of legislations have been formulated in different periods of time for business or institutions registration in Nepal, and business registration has been made in various authorized bodies in accordance with the prevailing laws and regulations, for example Company Act, Proprietary Firm registration, partnership firm registration, Industrial enterprise act, provincial government acts, Local government act, etc. There exists still the multidoor registrations of the business entities while making functional the businesses, for example a company established with registration in company register office need to register in inland revenue office and local level government where it is located or to be operated. In such a case, a company may have registration information according to purpose in Office of Company Registrar, Inland Revenue Office and Local Level Governments. Due to the non-existence of a unified business registration system, data on business entities might have to be obtained from multiple authorities. The data integration makes the duplication of information of business entities. In

addition, the practice of registration differs even in organizations of the same nature. This kind of practices makes to non-uniformity for data collection.

3. Access constraints

Major source of formal business entities are different administrative sources. Information of business entities may have recorded in different authorized registration sources. There exist access constraints in acquiring data on business entities from different authorized agencies due to the provision of privacy issues and absence of clear data access or sharing legislations.

4. Diverse format

As different legislations prevail, the kinds and format of information categories are also in different standard for recording the information of business entities. In such situation, obtaining the consistent information and make consistent for statistical business register is challenging. The record keeping system exist either in paper book register in many local levels or digital form in few as well. If the records are kept in digital form, it is easy to obtain data although it may not be in standard format. It is difficult to transcribe the information of registered business entities if the records are kept manually in paper register.

5. Common Identifier

As mentioned earlier on diverse nature of business registration and record keeping, it is obvious challenge for having common identifier or unique identifier. However, if they are registered in inland revenue office, Personal Account Number can be assumed as standard common identifier. However, the data has not yet been obtained from inland revenue office to NSO. Common identifier may be developed after having study of diverse nature of businesses, registration system, and record keeping system.

6. Duplication Issue

As mentioned earlier, if the same business entity is registered in multiple authorities, there is high possibilities of duplication of same entity in SBR if data is acquired from these authorities.

7. Maintenance and Update of SBR

Although SBR is main source of frame data for diverse establishment based economic surveys, updating and maintenance of SBR is extremely challenging in the condition of prevailing issues and due to insufficient infrastructures for SBR maintenance and update, like data integration policy and procedures in Nepal.

While the initiation of the SBR in Nepal is promising, several challenges need to be addressed to ensure its effectiveness and accuracy. Hence, ensuring accurate and complete data collection from businesses, including informal sectors and small enterprises, remains a challenge due to varying levels of awareness and cooperation, coordination, prevailing legislation and practices, and infrastructures. Integrating data from different government agencies and departments is crucial for establishing a comprehensive SBR. However, data sharing mechanisms and protocols need to be established to facilitate this process. Safeguarding sensitive business information and ensuring compliance with data privacy regulations are critical to building trust among businesses and stakeholders. The long-term sustainability of the SBR requires dedicated investment, technological compliance, institutional commitment, and a clear roadmap for its development and maintenance.

Prospects for Building Statistical Business Register in Nepal

Despite the many challenges as mentioned earlier, there exists high prospects or opportunities for the development of statistical business register in Nepal in future. In recent days, in the context of the increasing usefulness of economic statistics and its growing demand, it has been felt that the basic statistical infrastructure should be established for the production of various economic data. Establishment of Economic Census Section as an organizational unit within NSO in 2014, implementation of National Economic Census in 2018, continuation of efforts to build SBR engaging its sub-ordinate offices with allocation of annual budget resources, development of CSPro based application for data management with the scope of advance improvement, capacity development for staff of NSO on SBR and development of instruction manual are some of the prospects for the development of SBR in Nepal. Similarly, there is high scope of development of sustainable SBR in Nepal due to recent promulgation of Statistical Act 2022, as it has conceived the vision of national statistical system with the integration of data collected and compiled by NSO, government or public authorities. The act further has made NSO as nodal statistical body for coordinating the affiliated agencies in the statistical system and which will have access to the management information system and administrative record keep with perspective of statistical production. Similarly, Government of Nepal has recently prioritized a national data profile (NDP- www.nationaldata.gov.np/) with the purpose of data linkage at downward to local government and horizontal linkage with line agencies for uploading the data produced in the respective agencies and utilization of the data for various statistical

purpose by diverse users. The management information system of offices like Inland revenue department, office of Company Registrar is more IT oriented nowadays. Such digital environment is conducive for building enhanced statistical business register system with creating a coordinating mechanism in future.

After the introduction of federal structure in Nepal, local government bodies are more empowered in many respects, among them, local bodies are liable to register any business entities operated in their territory and have obligations to manage record keeping. Such situations are suitable opportunities for enhancing SBR with the integration of data of business entities via appropriate integration mechanism.

Conclusion

It is well known fact that there needs complete count of population units engaged in different economic activities while drawing sample frame and conducting various economic surveys. Establishing infrastructure for recording, updating statistical units either population or establishments are inevitable for operation of smooth statistical system in the country. In the condition of the growing demand of economic statistics, it has been realized to establish Statistical Business Register in Nepal, accordingly economic census section as organizational unit under NSO has made its best efforts in advancing the SBR activities. Further, in the situation of predominance of informal economy, it is equally challenging to cover the economic units of informal sector. Practically it is not easy to update the informal establishments other than compilation of formal establishments regularly via different administrative records.

Despite the various constraints and existing challenges like capacity, resources, access, information technology quality, the National Statistics Office has made its efforts starting to build SBR in Nepal by utilizing the available opportunities. Prevailing new legislation will be supportive in making SBR as integrated infrastructure for compilation, update and maintenance of SBR in coming days. It has been assumed at the early stage with the perspective of development of SBR in Nepal. Standardization of administrative record keeping system of business units in various administrative offices is equally important before importing or linking data to SBR platform. There needs to develop distinct SBR policy for implementing common business ID system as a common identifier and data integration from various admin sources along with census and survey sources. NSO have plan to dialogue with multi authoritative agencies Iresponsible for registering businesses for the development of SBR. Also, it has been felt that strategic targets have to be determined in phase wise while developing SBR. To proceed this,

a common policy level consensus among the data providing agencies or administrative record keeping agencies is required while developing strong SBR system. Along with this, equally important is literacy of SBR's role, investment in information technology and required human resources for building and smooth running of SBR. A long-term vision is the automation of IT based SBR where the information from administrative records will flow automatically in the SBR mechanism. Although long term vision is to provide updated survey frames and basic economic statistics, which is till in infancy stage. Also, a chain of survey programs also needs to be developed depending upon the SBR with the perspective of utilizing SBR.

Hence, it is crucial need to effectively and efficiently conduct a sustainable program for the building of a statistical business register in Nepal through coordination, cooperation and collaboration with major government official bodies such as the Internal Revenue Office, the Company Register Office, the Department of Commerce, and local municipalities that keep the official records of business units of diverse ISIC sectors. For this work, it seems necessary to develop the necessary policy arrangements, necessary budget arrangements, capacity development, institutional capacity development, development of necessary information technology infrastructures. Nepal's Statistical Business Register has the potential to evolve through various stages of maturity like establishing basic foundation, integration and consolidation, data validation and quality assurance, data utilization and continuous improvement in future. By addressing challenges, ensuring data accuracy, and advancing through the stages of maturity, Nepal's SBR can become a valuable asset for the nation's statistical and policy landscape.

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