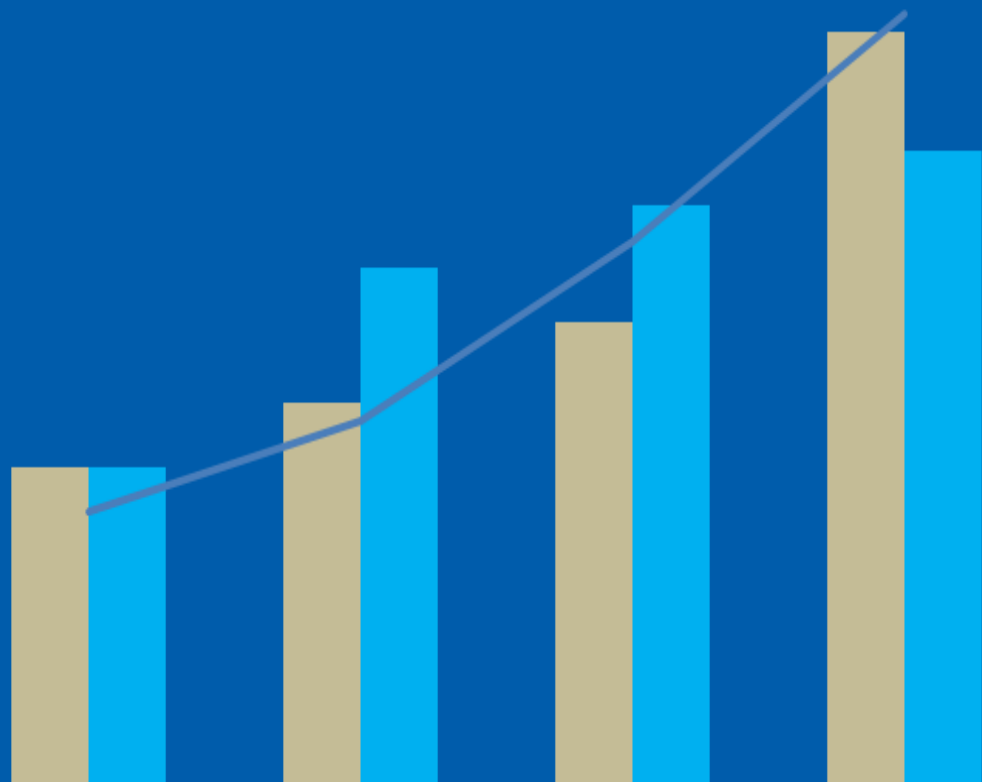




Republic of Rwanda



LABOUR STATISTICS FRAMEWORK OF RWANDA





Republic of Rwanda



LABOUR STATISTICS FRAMEWORK OF RWANDA

Additional information about the Labour Statistics Framework of Rwanda may be obtained from the NISR:

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E-mail: info@statistics.gov.rw; Website: <http://www.statistics.gov.rw>.

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Foreword

Labour statistics play an essential role in the efforts of the country to achieve decent work for all. These statistics are needed for the development and evaluation of policies towards this goal and for assessing progress towards decent work. In the same context, Rwanda is committed to achieve its overarching objective set in vision 2020; transforming Rwanda into a middle income country. Guided by this vision, the Second Economic Development and Poverty Reduction Strategy (EDPRS 2) set out target of creating 200,000 off-farm jobs annually to speed up employment growth. At the same time, the country continues to make great progress towards achieving the Millennium Development Goals (MDGs).

To monitor progress towards these goals and targets, relevant, reliable, coherent, timely and accessible labour statistics have to be produced. Considering the complexity of labour market, a Labour Statistics Framework has been developed and documented by the National Institute of Statistics of Rwanda (NISR) to ensure the coordination of all activities related to data collection, data analysis, and dissemination of labour statistics in harmony with international standards. In addition to that, a metadata handbook that describes the indicators related to labour statistics has also been developed.

We at NISR expect that this framework and related metadata handbook will ensure the production of labour statistics across the National Statistical System (NSS) which in return improves the evidence based policy formulation and decision making.

I would like to thank Doctor Abimbola Sylvester Young, the former Director of Statistics Department in ILO, different stakeholders and NISR team who contributed towards the realization of these documents. Finally, I highly encourage all key stakeholders to make full use of the framework and related metadata handbook to enhance the quality of labour statistics in Rwanda.



Yusuf MURANGWA
Director General, NISR



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Chapter 1: Background

1.1 Scope

Labour statistics are used to describe and analyse the size and structure of labour markets and how these change over time and space, including differences between groups. They relate to persons and businesses, describing their characteristics and behaviours in and around the world of work, and their interactions with government. In its widest sense, work references work done for pay or profit (employment work), work done in production of goods and services for own consumption (own-use production), work done by unpaid trainees and apprentices and volunteer work. In the context of the labour market, work done in own-use production of services, which is excluded from the System of National Accounts (SNA), is not covered.

1.2 Purpose

The labour market in Rwanda is becoming more and more complex over time, raising many questions. To what extent is employment provided less and less by government and public service and more and more by the private sector? Are there less rural subsistence agricultural jobs and more urban own-account low quality jobs? What effect does volatile global markets and the existence of interactive regional markets and economies have on the economy and on the labour market? The population is increasing as well as the number of educated persons. What pressure are they putting on the labour market? Are sufficient new jobs being created to absorb the increase? Are these good jobs? How fast is production shifting from the agriculture, manufacturing sectors to the service sectors? Are there skill shortages and skill mismatches in the labour market? Do shortages of skilled workers in priority sectors exist? If so, which ones and which occupations? Are they hard technical skills or soft skills such as initiative, flexibility, communication, group interaction, etc.? At the same time, are there persons working in jobs lower than their skill level? If so, who are they and what are their characteristics (age, sex, location, areas of study, etc.)?

These questions and many more are posing challenges for producing relevant labour statistics. It is therefore imperative to develop an organizing framework for their production, analysis and dissemination in response. Whilst the framework recognizes the needs of EDPRS2 and NEP, it takes an all-encompassing approach to organizing labour statistics in general.

1.3 Uses

Labour statistics are used for policy formulation as well as for development, evaluation and monitoring of programmes in various areas such as employment and active labour market policies, vocational training, human resource development, poverty and social exclusion.

In particular, they are needed for:

- employment and active labour market policies and programmes (e.g. NEP);
- analysis of the dynamics of the labour market with respect to (a) the size, distribution and characteristics of the labour force; and (b) the evolution in labour demand, including job creation and vacancies (e.g. EDPRS2 targets);
- assessing mismatch between labour supply and demand, instrumental in the formulation of policy regarding the role and performance of the educational system, training and labour adjustment policies (one of the key objectives of EDPRS2);
- macro-economic policies and measurement of the performance of the economy;
- analysis of terms and conditions of work including wages policies and protection of workers (health and safety);
- labour market regulatory policies, industrial relations policies, monitoring the volatility of labour management relations;
- welfare policies, poverty concerns, social inclusion and other assessment of hardship of the population;
- monitoring the employment situation of special groups such as women and youths;
- providing signals on undesirable economic and social conditions of work such as child labour, gender biases in work places, etc.

All of the above are required at sub-national, national as well as supra-national levels.

1.4 Outline of document

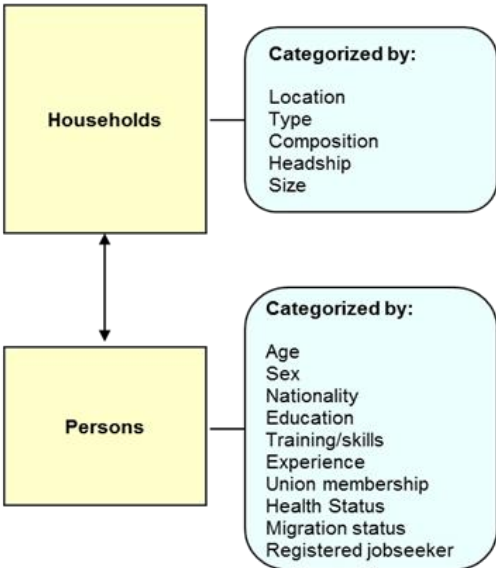
The conceptual framework is introduced in Chapter 2. It is an adaptation of the classical model of a labour accounting system. Chapter 3 describes the operational framework, in terms of identifying a structure for organizing labour statistics in Rwanda and describing the best sources for producing these statistics. In Chapter 4, the labour statistics that are available in Rwanda are presented and assessed, along with the producing institution, vis-a-vis the identified best sources. Chapter 5 presents recommendations for moving towards the ideal sources through the realisable ones. It also makes suggestions with respect to institutional arrangements, analysis and dissemination strategies. Chapter 6 is about the program of production of labour market statistics for the Rwanda Labour Statistics Framework

Chapter 2: Conceptual labour statistics framework for Rwanda

2.1 Labour supply

Persons (living in Rwanda or elsewhere) actually supply their labour or are potential suppliers of their labour to employers in Rwanda – the supply side. These persons live in households, broadly defined. These households have characteristics such as geographical location, size and so which can then be associated with persons living in them. The persons themselves have their own individual characteristics, indeed very many, such as age, sex, educational attainment, migration status, etc. These household characteristics and/or person characteristics can then be used to generate statistics relating to the numbers of persons and/or households having each of these characteristics. (See Diagram 1). For example we can produce the distribution of persons by sex. These are the initial labour (supply) statistics.

Diagram 1: labour supply

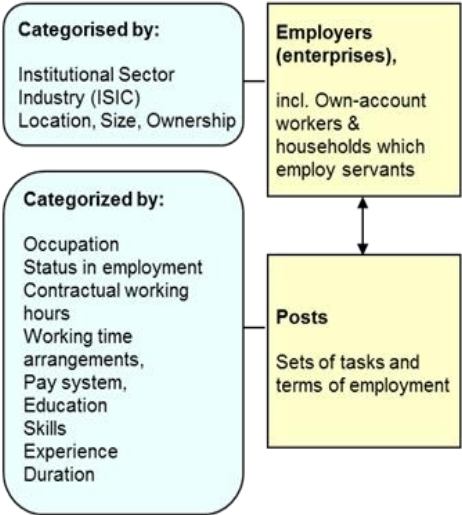


2.2 Labour demand

Employers in Rwanda (defined in a wide sense to include own-account workers and households employing staff) require labour to carry out their production activities – demand side. They parcel out the work that needs to be done into individual posts. These employers have characteristics (e.g. economic activity sector, institutional sector, geographical location, ownership status, etc.) which then pass on to the posts. The posts themselves have their own characteristics such as occupation, contractual hours of work, working time arrangements (e.g. part-time, full-time), educational qualifications, skills, experience, etc. associated with the post. Counting

the number of posts having any of these employer and /or post characteristics can generate statistics on labour demand. (See Diagram 2.) For example the distribution of posts by level of qualifications required can be generated. These are the initial labour (demand) statistics.

Diagram 2: Labour demand



2.3 Labour market

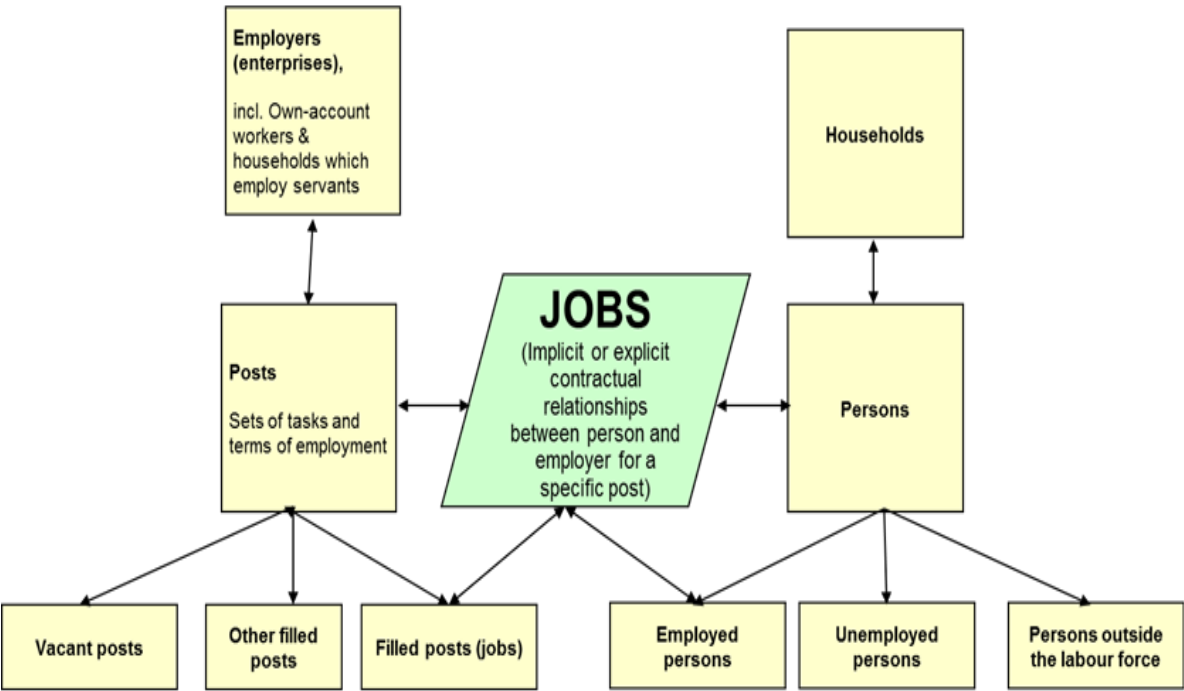
Most posts created by employers have financial returns attached to them in the form of monetary gains in cash or kind. When a person and an employer agree on terms for such a post, the person fills the post, which then becomes the person’s **job**. So jobs are the point where labour supply meets labour demand. A person that has secured a post is labelled ‘employed’ and is considered to be in the ‘labour force’. It is important to note that a person can in fact have more than one job negotiated with one or more employers. Some persons however potentially want to supply their labour by securing any post but are unable to do so even though they want to and are looking for one. They are labelled as being ‘unemployed’ but are still considered as being in the ‘labour force’. Some others who also potentially want to supply their labour by securing a post are unable to do so even though they want to do so but are not looking. They are considered as ‘out of the labour force’ and as being in the ‘potential labour force’. Hence the supply side can be categorized as “employed”, “unemployed” and “out of the labour force”. (Diagram 3)

A job is then a post that has been filled, a filled post. However employers may look for persons to take up their posts without success. Such posts are then considered to be ‘vacant posts’. A few posts do not have any financial returns attached to them, for example posts occupied by volunteers or by persons working for their own

consumption. When these are filled, they are not considered as jobs but are referred to as 'other filled posts'. Thus the demand side can be categorized as jobs, vacant posts and other filled posts. It is possible, though rare, that a post can be filled by two or more persons and so become two or more jobs, e.g. two persons, one working mornings (as a part-time job) and the other working afternoons (as another part-time job) filling the same post! (Diagram 3).

So the above statistics of labour supply can now be extended to the sub-groups of 'employed', unemployed' and 'out of the labour force' whilst those of labour demand can be extended to the sub-groups 'filled posts (jobs)', other filled posts and 'vacant posts'.

Diagram 3: Labour market



2.4 The Rwanda Labour Statistics Framework (RLSF)

When a job is created by the agreement between an employer and a person through an implicit or explicit contract, it includes the characteristics agreed on by both parties (set of tasks and the conditions of work) – the duties and responsibilities, the pay and method of payment, the normal and or overtime hours of work expected, the entitlement to benefits such as paid leave, training, to insurance against occupational injuries and diseases and so on. Others come in with the implementation of the agreement such as hours actually worked in the job or actual overtime hours. These then translate through the job to both the employed

person and to the filled post. Statistics relating to these characteristics as well as the household and person characteristics can then be produced for each employed persons or their households, for example the average number of hours worked by employed persons in Kigali. These are then extensions to the labour (supply) statistics. In a similar way the labour (demand) statistics are extended to take on these acquired characteristics from the job, for example the average pay for manufacturing jobs in the private sector.

Another extension to both labour (supply) statistics and labour (demand) statistics comes through the linking of the supply side characteristics of the employed person to the demand side characteristics of filled post through the job. Thus, these statistics can now be produced by combining any of those of the employed person, their household, their job, the filled post and employer characteristics. For example the well-known distributions of employed persons by occupation, industry, institutional sector or status in employment come from this. The average income, hours worked in all jobs of employees by industry is another example. (Diagram 4)

Diagram 4: Conceptual Framework for Labour Statistics

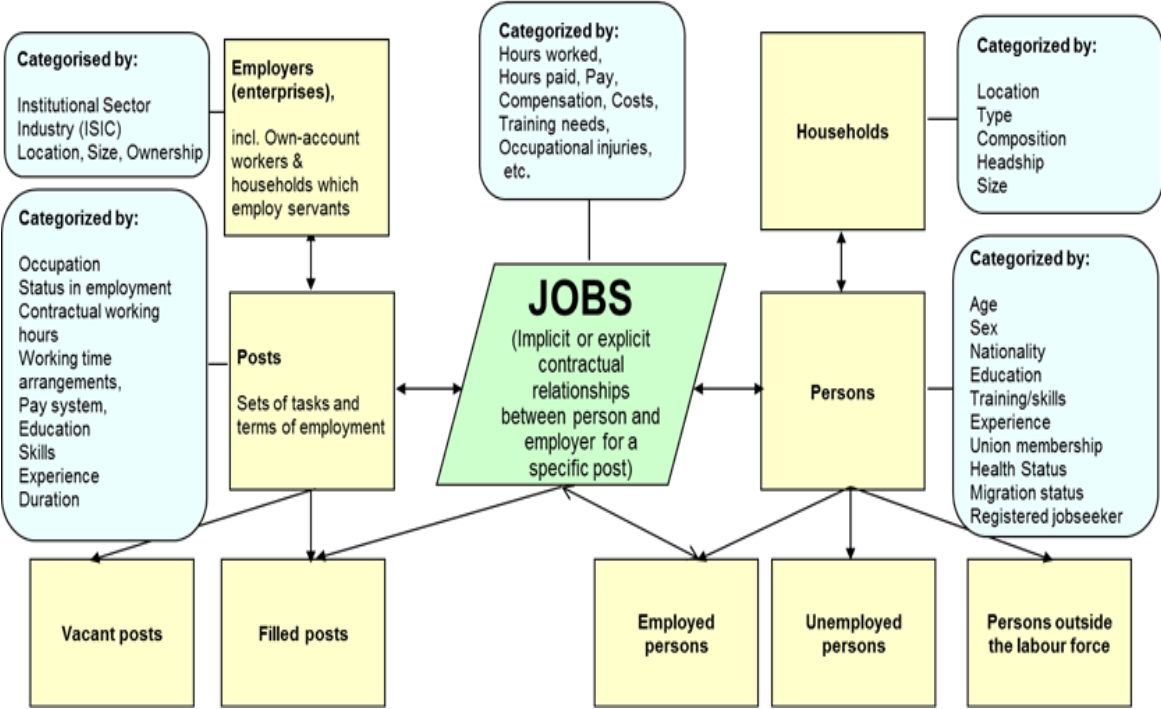


Diagram 5: Operational frame work for Rwanda Labour Statistics

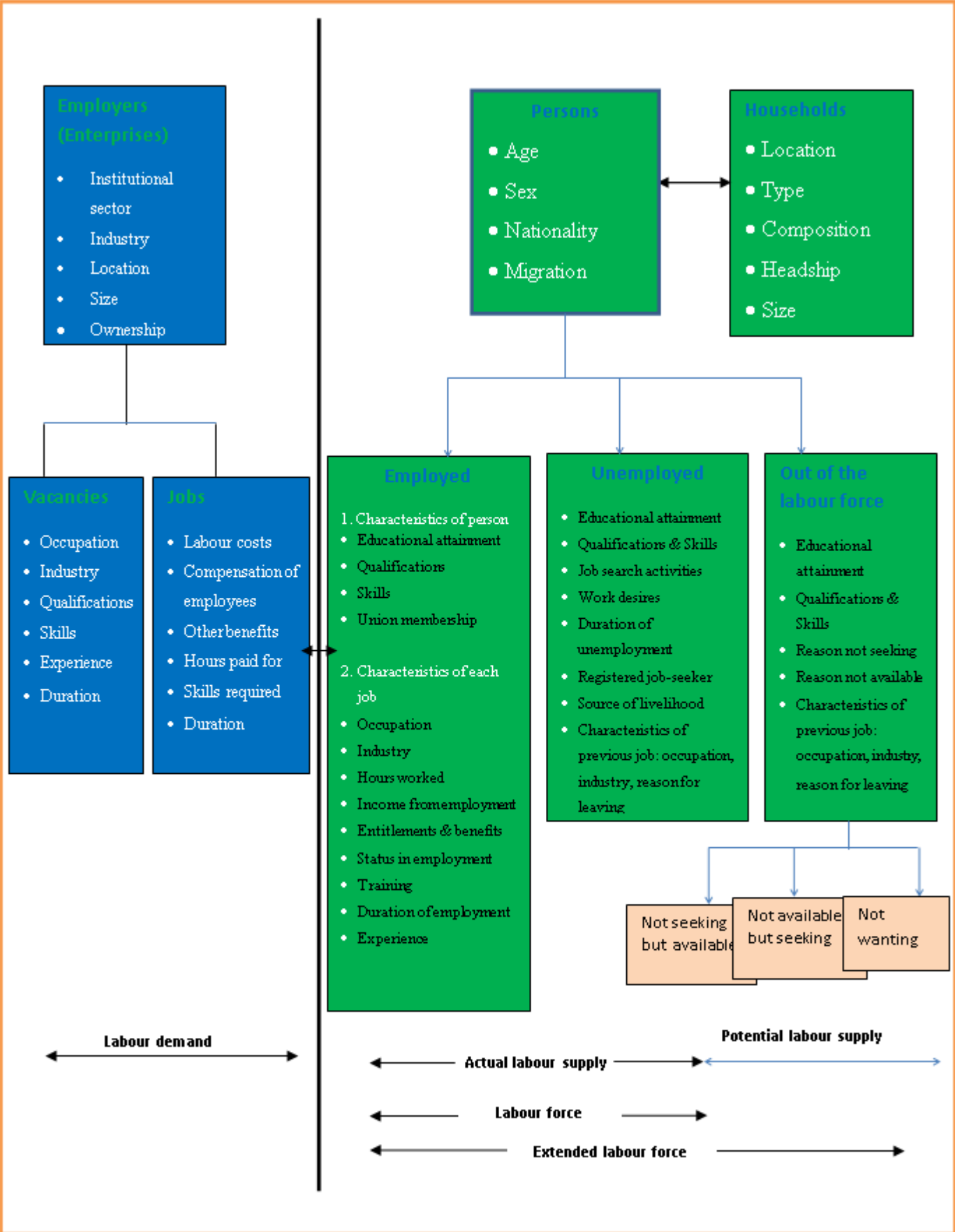
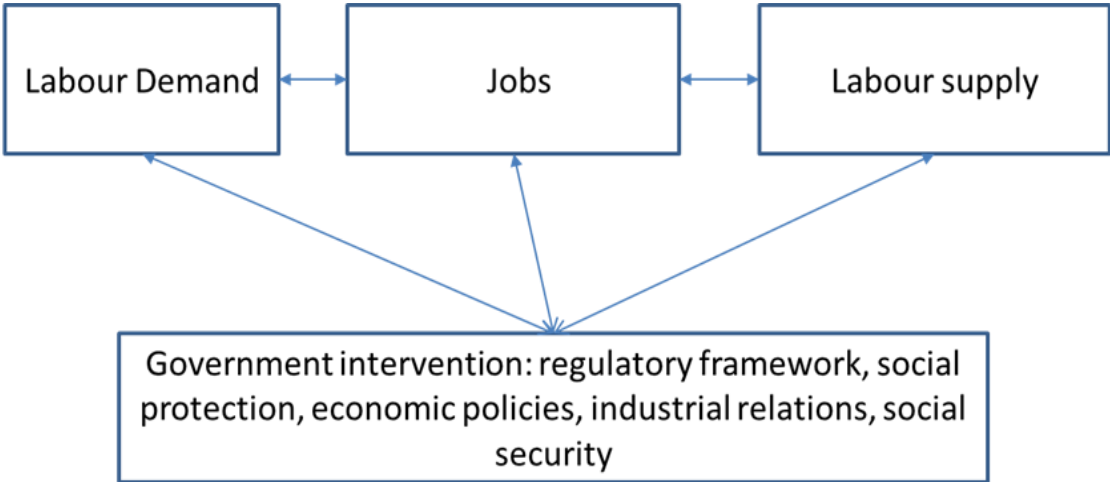


Diagram 5 presents an alternative to the above framework and its wide range of statistics that is more familiar and closer to the way these statistics can be generated. This alternative assigns the inherited characteristics from labour demand to the labour force categories and vice-versa. As a result, they can be seen by the way the data are usually collected through household surveys, on the one hand, and establishment surveys on the other. The presentation thus leads to the operational framework discussed in the next chapter.

A major actor in the labour market is government, through its regulatory framework and its social protection framework to ensure equity and protection for all, both employers, those in the labour force and in the potential labour force. Government also influences the labour market through its macro-economic, fiscal and micro-economic policies which enhance the environment for employers to create jobs. Statistics relating to industrial relations, labour and factory inspection services, social security directly impact on the labour market and those relating to inflation, economic growth, infrastructure and productivity do so indirectly (Diagram 6).

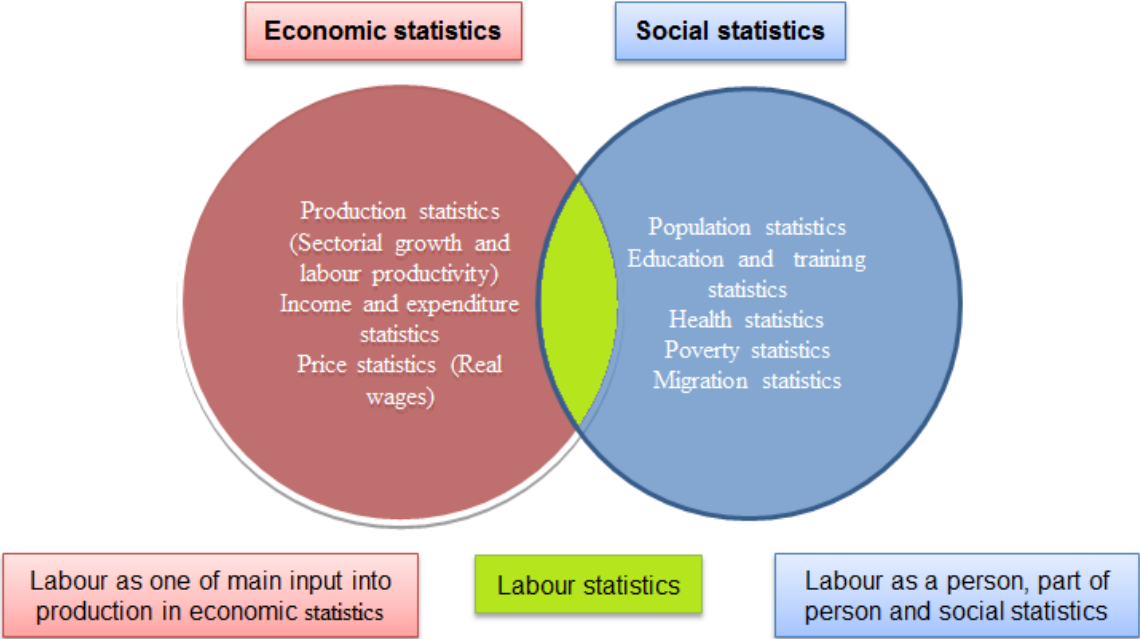
Diagram 6: Extension of labour statistics framework for Rwanda



Linkages to other statistical systems come through the positioning of labour statistics as a bridge between social and economic statistics. (Diagram 7) In particular, the linkages with social statistics are as a result of persons being the basic units on the labour supply side and in all these systems. The interaction is both in terms of statistics relating to persons in the labour force and their situation vis-a-vis these other systems as well as statistics relating to the work force required in these other systems. For example, links with health statistics come from the need to follow up the health status of workers, in particular occupational injuries and diseases, as well as to describe and analyse the health work force. Education statistics are required to assess the current and future skilling of the labour force whilst labour statistics contribute to the planning and analysis of the education work

force. Population statistics is key in following up the evolution of the labour force and its categories. Migration statistics helps in understanding skill needs and planning of training programmes. The demand side links up with economic statistics mainly through employers. For example, statistics relating to sectoral growth and productivity are important in analysing employment and in the development of appropriate training programmes to meet the expected demand from employers. All these systems also interlink through the common use and exploitation of data collection instruments, common definitions and classifications.

Diagram 7: Linkages of the Rwanda Labour Statistics Framework to Other Statistical Systems



The labour statistics framework is thus a core element of the national statistical system, as enunciated in NSDS2.

The advantage in utilizing a labour accounting framework is that it enables an exercise in reconciling statistics from both the supply and demand sides and improving all aspects of the quality of labour market statistics. Statistics obtained from different sources for the same characteristic could differ for various reasons. There may be differences due to:

- a) Definitions (e.g. unemployment and job-seekers) and classifications (age groups) of variables;
- b) Coverage - scope of units (e.g. all workers and paid employees), of variables (income and taxable income), types of units (enterprises and establishments);
- c) Precision - censuses and samples; national and district;

d) Errors - types and levels of errors.

Possible actions that can be taken in such cases are: simply noting the differences; harmonising definitions etc.; reconciling the differences (i.e. account for differences), adjusting one or other of the estimates. This coherence between sources, an important quality measure, can be assessed through using the framework. For example, the conceptual model described above implies that the total number of people employed (in their only or main job, their second job and so on, counting them as often as they have jobs) as measured from a labour force survey should be consistent with the total number of jobs as measured by an establishment survey, everything else being equal.

Chapter 3: Operational framework for Rwanda Labour Statistics

3.1 Structure for organizing Rwanda labour statistics

The structure proposed for the framework is the one adopted in the Metadata Handbook (Annex 1). It flows naturally from the above conceptual framework, grouping the statistics according to their relevance for labour supply and labour demand as well as introducing context indicators for the interactions between government's interventions and the labour market. It consists of four major categories: labour supply (labour force), labour supply (other work activities), labour demand and context. Each category is further sub-divided into groups representing major themes.

The structure is as follows:

3.1.1 Labour supply (labour force)

- 1) Population
- 2) Labour force
- 3) Employment
- 4) Labour underutilization
- 5) Wages
- 6) Skills
- 7) Employment equity & Industrial relations
- 8) Safe work & Social protection
- 9) Poverty of employed population

3.1.2 Labour supply (Other work activities)

- 10) Other labour input into SNA
- 11) Other non-SNA labour input

3.1.3 Labour demand

- 12) Vacancies & Jobs
- 13) Labour as costs to employers
- 14) Establishments

3.1.4 Context

The above structure fits in with other alternatives such as:

- The ILO Convention 160 and Recommendation 170,
- ILOSTAT, the ILO's flagship database,
- ILO's Key Indicators of the Labour Market (KILM),
- ILO's Decent Work Indicators (DWI); and
- Millennium Development Goals (MDGs)

- East African Community database (EAC).

3.2 Sources of Labour supply statistics

These statistics, as described on the right-hand side of Diagram 5, can be obtained from a variety of the following sources:

- Directly from households, through labour force surveys, other household surveys or population censuses;
- Indirectly from households, through reporting by persons to some institutions, e.g. Workers' Organization, Employment services.

3.2.1 Labour force surveys

Labour force surveys are the best source for these statistics in terms of the coverage of the population, the wide range of topics relating to the work activities of the population and the high quality of data collected on these topics. Labour force surveys, appropriately designed, can cover:

- ✦ Virtually the entire population of a country and all categories of workers, including the self-employed, unpaid family workers, casual workers and multiple jobholders;
- ✦ Socio-demographic details, geographical location, education, training and other person and household characteristics (as listed in Diagram 1);
- ✦ All branches of economic activity and all sectors of the economy;
- ✦ Employment, employment in the informal sector and informal employment;
- ✦ Unemployment, under-employment, the potential labour force and other forms of inadequate employment;
- ✦ Characteristics of jobs of employed persons - occupation, industry, employment status, institutional sector, hours of work, wages and employment related income, methods used to find the job, work experience, etc. – equivalent to characteristics of filled posts, if all jobs (main, secondary, etc.) are counted;
- ✦ Characteristics of previous jobs of the unemployed and persons out of the labour force;
- ✦ Other work activities: production of goods and services for own use, unpaid trainee/apprentice work, volunteer work;
- ✦ Population out of the labour force;
- ✦ Others: labour migration, social security & social protection, trade union membership, children's activities & child labour, occupational injuries,

vocational training, labour market experience of recent school leavers, etc. through special modules

In addition, labour force surveys allow joint and mutually exclusive measurement of the employed, unemployed and those out of the labour force in a manner that is proper (i.e. according to international standards¹) and produces good quality data.

Using appropriate sampling schemes, labour force surveys can be designed to measure individual changes between and within labour force categories and thus provide not only stock data for a given point or period of time, but also data on flows and gross changes over time.

However, labour force surveys

- are relatively costly to conduct, especially if conducted with high frequency;
- introduce imprecision through sampling, especially for small area statistics of interest (e.g. Number of female unemployed in Kiyovu), and so have limited application for statistics at detailed geographic and other disaggregation levels;
- are subject to recall errors;
- do not always cover all jobs of employed persons;
- may not produce good data on income from employment, especially of the self-employed;
- exclude persons employed who are not domicile;
- do not collect information on vacancies and on training needs; and
- require good statistical infrastructure.

Labour force surveys should preferably be regular (monthly or quarterly in some countries, at least annually), generally comprehensive (covers the whole population) and provide high quality estimates meeting international standards.

3.2.2 Other household surveys

Data on employment, unemployment and persons out of the labour force at less detailed level are also produced as part of other household surveys such as living standards surveys, household income and expenditure surveys, child labour surveys, demographic and health surveys. They can sometimes be classified by some of the same characteristics as in the labour force survey. They can enrich the analysis of the employment situation of persons by cross-classifying the labour force status of persons with the main survey variables, for example to produce estimates of working poor, of employed persons living with HIV/AIDS, etc.

They usually have good coverage of the population. However the coverage of household/person categories would depend on main purpose of survey. Also, the classification of persons by their labour force status and related data on the characteristics of these groups may not be of the best quality due to small sample sizes and the demands on enumerators to cover so many topics. They also have limited coverage of employer, posts and jobs categories relative to the labour force survey. These surveys also have the same challenges as those for labour force surveys.

3.2.3 Population censuses

The importance of this source of labour supply statistics is in the comprehensiveness of its coverage of the population. It can thus provide estimates of basic labour force statistics at very detailed geographical levels (e.g. village unemployment rates) and at detailed levels of occupational and industrial classifications (e.g. number of plumbers in the farming sector in a given district). The population census can also relate the labour force characteristics of the population to other census variables such as education and migration.

The main challenge in using this source is the likely poor quality of the employment data due to the use of fewer questions compared to the previous sources. As a result, the classification of persons by their labour force characteristics is less precise and there is limited scope for topics covered with respect to the person, employer, post and job categories. It is also an expensive exercise, hence its 10-yearly frequency and excludes persons employed who are not domicile.

The population census is a very good sampling frame for household surveys.

3.2.4 Other surveys

Statistics relating to training can be derived from special surveys or censuses of training/education institutions. Data is collected on staffing of these institutions as well as on final outputs, other exits and enrolment at different levels of the courses. Such data is valuable in understanding the skills availability of the future cohorts entering the labour force and could guide to further training that may be required. The challenge facing such surveys is the low response rates due to school systems that are already over-burdened with administrative and academic tasks. Ideally, such surveys should be annual.

A preferred method for obtaining this data is through the administrative system of the ministry of education. Provided the system is efficient and effective, the data collected will be comprehensive and complete. The cost will be relatively cheap and the data will be available annually. A computerized system is best placed to do this.

Also tracer type surveys provide information on the adequacy and efficiency of the training system by assessing the labour market performance of past graduates from

the system and the satisfaction of their employers with their entry skills. It is necessary to allow a sufficient time lapse between the exit of the graduates from the training system and the survey so that enough appreciation of the use of the available skills of the graduates would have been gained by both the graduates and the employers. The challenge is ensuring a good sampling frame of these graduates with up-to-date contact information. Otherwise, the rate of persons not traced could be high. As the time since graduation increases, the higher this rate will be. A good balance is required between these two apparently conflicting time constraints. Such surveys are carried out about once every 3 to 5 years.

A particular type of survey relating to training is the school-to-work transition survey which is directed at ascertaining the experiences young school-leavers are having relating to their entry or otherwise into the labour market. This is largely an ad hoc survey.

3.2.5 Administrative records

Statistics on some aspects of labour supply can be obtained from the administrative records of institutions to which persons report in relation to their work activities such as their trade unions and employment agencies. These sources are useful for some labour force characteristics such as trade union membership and the job-seeking of persons and can also include some person categories such as sex. They are low cost, reference the whole group covered across the country without any additional reporting burden on respondents. Timeliness is another good characteristic of these sources due to their reporting mechanism. There are however many drawbacks usually associated with administrative sources such as the possibility of a change in their current legislation which could affect the data collected, the scope and coverage issues (e.g. not all unemployed register as job-seekers and not all who registered job-seekers are unemployed), false/inadequate reporting and issues of confidentiality.

3.3 Sources of labour demand statistics

Statistics on labour demand are produced from various sources:

- Directly from enterprises, through establishment censuses; establishment surveys; notification system.
- Indirectly from enterprises, through reporting to other institutions, e.g. Tax authorities, Social Security, Employment Ministry, Immigration, Employers' Organization and Employment Services

3.3.1 Establishment surveys

Establishment surveys with employment data provide an excellent source of data on income from wage employment, earnings, labour costs, hours of work (hours actually worked, hours paid for, normal hours and overtime hours) and labour turnover (based on payroll records). They are a good source for statistics on paid employment (including jobs created), labour demand (vacancies), training needs, conditions of work and labour productivity. They can be employment specific: (a) the establishment surveys of employment, earnings and hours of work conducted monthly, quarterly, half-yearly or annually; (b) manpower (labour demand) surveys of establishments and their individual employees conducted every 3 to 5 years. Sometimes the employment data is generated as part of a production survey of establishments.

Manpower surveys collect total employment, paid employees (occupation, sex, educational level, nationality, etc.), labour turnover (main causes, characteristics of persons), vacancies, future job openings (employers' expectations), training provided, skills needed, etc. from the establishments. From the employees data collected include socio-demographic characteristics, educational attainment, job characteristics, training received, previous job history and information on their other jobs.

Establishment surveys produce good data for population of establishments covered and the variables available as the information is usually based on establishment records. Also, the data collected is consistent with those for production and factor income (SNA) and is usually at detailed industry and occupation levels (3-digit codes). They are easier to implement than household surveys and not as expensive.

A major challenge faced by such surveys is that their coverage depends on the quality of the population frame of businesses. Often, only registered businesses or formal sector establishments of a certain size are included in the frame. Sometimes the frame excludes very small businesses, certain economic activities and many informal sector enterprises, especially those operating from home or which are itinerant. As the birth and death rates of establishments are high, the frame quickly becomes out of date with incomplete coverage and/or dead elements. The surveys have limited information on person/household categories for those in filled posts and suffer from poor response rates. Moreover the data submitted is only summary information on filled posts (paid employment) and total wages classified by sex. It should be noted that establishment surveys provide information on jobs and persons in those jobs. So for multiple jobholders, there is some risk of double counting if the statistics are interpreted as number of employed persons. Also the data may include non-domicile persons.

3.3.2 Establishment censuses

Establishment censuses are conducted less often than establishment surveys, sometimes 5-yearly, and collect limited information about establishments. They produce a register of establishments which can act as a good frame for the establishment surveys provided it is maintained and kept up-to-date.

3.3.3 Administrative records

Labour statistics may also be compiled using administrative records of agencies such as the ministry of labour, immigration authorities, the social security organization, the revenue authority, the employers' organizations and employment service agencies. Examples of such records with statistical potential are: Employment services registers; Unemployment insurance records; Social security files; Revenue authority files; Reports of disputes resolutions; Reports of labour/factory inspections; Public sector payrolls; Employers' organization records, Immigration office records.

These records can be used to provide estimates of

- employment (actually jobs), employers (establishments) and their characteristics (from social security files, revenue authority files, employers organizations records),
- wages, social security beneficiaries and benefits paid (social security files, revenue authority files),
- public sector employment and wages (public sector payrolls);
- migrant workers (immigration office records),
- occupational injuries (compensation payment records),
- registered jobseekers and notified vacancies (employment services registers);
- industrial relations matters (reports of dispute resolutions, union registrations, collective agreement registrations), safety and health, observance of labour laws (reports of labour/factory inspections),
- membership of employers' organization (employers' organization records), and so on.

Administrative data are the easiest and cheapest source of labour statistics. They are timely and current, as they are frequently produced, and can be obtained at detailed levels of disaggregation. They have good coverage, depending on compliance of establishments concerned, and good data on variables of interest to administrative process. They are frequent and timely and not too expensive, relatively. They provide a full count of their relevant units and impose no reporting burden on them. It is sometimes possible to provide statistics from them at deep geographical and other disaggregation levels.

However as they are produced as a by-product of the administrative functions of an agency, (i) their definitions etc depend on the legislation and the administrative system of the agency; and (ii) they are subject to the whims of the administrative processes. As such they rarely conform to accepted statistical standards. Also, they may have low coverage (not all units are registered or required to be registered) and may not be timely, as priority may not be given to statistics. Data on variables not of direct concern to the administrative process may be unreliable (data checking may be restricted to items of strong interest to the admin system) and so may be of poor quality, e.g. sex to tax authorities. There is also possibility of inaccurate reporting to maximise benefits or to minimise penalties. Statistics may vary over time and between locations because of differences in procedure, resources, etc.

It is important to note that the statistics produced are on jobs and not necessarily on employed persons. Also the data may include non-domicile persons. Finally, the data may not be in a format convenient for producing statistics and so there could be conversion costs.

3.4 Conclusion

Statistics on the extended labour force, employment, labour underutilization, the informal economy and their characteristics are best obtained from labour force surveys. To the extent that all jobs of the employed population are included, these surveys also produce good data on job characteristics. This is particularly useful when establishment surveys do not cover small and informal sector enterprises. These statistics can also be produced by other household surveys but with less rigour and less scope.

Statistics on jobs and their characteristics, wages, hours of work, vacancies, training needs and skills mismatches are best obtained from establishment surveys, especially manpower surveys, provided coverage is complete. Again, provided the incidence of multiple jobs is low, the statistics on jobs can also refer to the employed population.

Administrative systems such as social security institutions and revenue authorities can be used to produce statistics on jobs and their characteristics as well as wages. However the extent to which they could be rigorous and complete would depend on take-up by establishments.

Income from employment statistics can be produced from labour force surveys but accuracy and rigour, particularly with self-employment income, could be challenging. To the extent that it can be done accurately, income from self-employment is best obtained from household surveys on income and expenditure with an enterprise module in which it can be measured as mixed income.

Other sources can variously provide these statistics but with less scope, rigour, coverage, etc. than the above.

Thus no single data source can meet all needs of the labour statistics framework. All available sources should be seen as components of overall system of labour statistics. The choice of any one source for a particular need must be done carefully, taking into consideration their relative strengths and limitations.

As many types of labour statistics can be generated using different sources, in disseminating the results it is necessary to make users aware that each source has differing strengths and limitations. Dissemination of labour statistics should follow the guidelines approved by the 16th International Conference of Labour Statisticians (ICLS)², the UN Fundamental Principles of Official Statistics³ and the IMF GDDS framework⁴.

² http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/guidelines-adopted-by-international-conferences-of-labour-statisticians/WCMS_087614/lang--en/index.htm

³ <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>

⁴ <http://dsbb.imf.org/pages/gdds/home.aspx>

Chapter 4: Available labour statistics system in Rwanda

4.1 Major producers of labour statistics

The table below presents the various data sources from all major producers of labour statistics according to the above structure of the labour statistics framework for Rwanda. For each group in the structure, the best source available is indicated with a star. The contents of the table are based on the published reports, questionnaires and websites for each source.

The major producers of labour statistics in Rwanda are identified as follows:

- National Institute of Statistics for Rwanda (NISR)
- Rwanda Social Security Board (RSSB)
- Rwanda Revenue Authority (RRA)
- Ministry of public service and labour (MIFOTRA)
- Rwanda Development Board (RDB)
- Ministry of Education (MINEDUC)
- Workforce Development Authority (WDA)

Some of these producers disseminate their statistics through the website of the Labour Market Information System (LMIS) of the Rwanda Development Board. In some instances, LMIS adds value to the statistics by adjusting some of the values. The data collection methodologies used by these institutions are surveys, censuses and exploitation of their administrative records.

Table 1: Available data sources for the labour statistics framework for Rwanda

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
Labour supply (labour force)						
Population	Population census*	HB	Age, Sex, Province, Residence	10-yearly (last 2012)	NISR	Working age population, Dependency ratios
	EICV	HB	Age, sex, province, residence	5-yearly (last EICV 3 2010/2011)	NISR	Working age population, Dependency ratios
	National Population Projections	AB	Age, sex, literacy	10 yearly (Last 2014)	NISR / LMIS	Projections of working age population and dependency ratios above (2007 – 2022)
Labour force	EICV*	HB	Age, Sex, Province, Residence, Educational attainment, Nationality	5-yearly (last EICV 3 2010/2011)	NISR	
	Population census	HB	Age, Sex, Province, Residence	10-yearly (last 2012)	NISR	
Employment	EICV*	HB	Age, Sex, Province, Residence, Educational attainment, Nationality, Industry, Occupation, Status in employment, Hours worked, Institutional sector	5-yearly (last EICV 3 2010/2011)	NISR	Data to measure informal employment collected but not used, Does not include employment in informal sector.

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	Population census	HB	Age, Sex, Province, Residence, Educational attainment, Nationality, Industry, Occupation, Status in employment, Institutional sector	10-yearly (last 2012)	NISR	Does not disaggregate by formal/informal sectors.
	Informal sector survey	HB		Once, 2007	NISR	
	Establishment census	EB	Sex, Province, Residence, Educational attainment, Nationality, Industry, Institutional sector, Size of establishment,	Once 2011	NISR	Actually number of persons in jobs, with possible multiple counting of employed persons with multiple jobs. Not all employed covered.
	Manpower survey	EB	Age, Sex, Province, Nationality, Industry, Occupation + Marital status, Educational attainment, Training, Disability status, etc.	Once 2012	NISR	Employers' Module: Actually number of persons in jobs, with possible multiple counting of employed persons with multiple jobs. Employers' & Employees modules: Formal sector employees & persons working in informal sector enterprises, Formal sector employers & Informal sector employers, Not all employed covered. Did not cover establishment with only one worker.

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	Annual Statistical Bulletin	AB	Province, Industry, Institutional sector, Age, sex	Annual (last 2010)	RSSB	All registered employers and contributors, Contributors only, Not all employed covered. Also possible multiple counting of persons with multiple jobs, if all jobs registered with RSSB.
	RSSB records	AB	Province, Industry, Institutional sector, Age, sex, migration, marital status (at affiliation)	Quarterly (last November 2013)	LMIS / RSSB	All registered employers and contributors, Contributors only, Not all employed covered. Also possible multiple counting of persons with multiple jobs, if all jobs registered with RSSB.
	RRA records	AB	Province, Industry	Annual (Last January 2014)	LMIS / RRA	All registered TPR and income tax payers, LMIS adjusted data
	Labour inspections	AB	Age, Sex, Province, Industry, Occupation, Nationality, Hours of work, Status in employment, Educational attainment, Duration of employment, work accidents, labour disputes, labour injuries	Variable	MIFOTRA / LMIS	All employed in inspected establishments
	IPPS	AB	Age, Field of education, Level of education, Contract, Location	Continuous	MIFOTRA / LMIS	Public sector employees only.
	ORG/RDB records	AB	Province, Institutional Sector		RDB / LMIS	All registered enterprises. Number of intended employees
Labour underutilization	EICV*	HB	Age, Sex, Province, Residence, Educational attainment, Previous job characteristics	5-yearly (last EICV 3 2010/2011)	NISR	Statistics on time-related underemployment as defined internationally not published but data collected.

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	Population census	HB	Age, Sex, Province, Residence, Marital status, Nationality	10-yearly (last 2012)	NISR	Only unemployment.
Wages	Manpower survey*	EB	Industry, Occupation	Once 2012	NISR	Employees only. No self-employment income.
	EICV	HB		5-yearly (last EICV 3 2010/2011)	NISR	Data collected but not analysed.
	Annual Statistical Bulletin	EB	None	Annual (last 2010)	RSSB	Monthly income distribution: Contributors only
	Labour inspections	AB	Age, Sex, Province, Industry, Occupation	Variable	MIFOTRA / LMIS	Wages of all employed in inspected establishments
	IPPS	AB	Age, Field of education, Level of education, Contract, Location	Continuous	MIFOTRA / LMIS	Wages of public sector employees only.
	RSSB records	AB	Age, sex, migration, marital status (at affiliation)	Quarterly (last November 2013)	LMIS / RSSB	Salary of Contributors only
Skills	EICV*	HB	Occupation, Labour force status	5-yearly (last EICV 3 2010/2011)	NISR	Measured by educational attainment
	Population census	HB	Occupation, Labour force status	10-yearly (last 2012)	NISR	Measured by educational attainment
	Manpower survey	EB	Occupation, Industry	Once 2011	NISR	Skills mismatch by Self assessment
	Statistical yearbook	AB	Level of education	Annual (last 2012)	MINEDUC	Outputs, Enrolled persons

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	Reports from Immigration Department	AB	Industry		MIFOTRA	Number of foreigners
	Sector surveys (ICT, Mining, Energy)	EB		Once 2012	ORG / RDB / LMIS	Skills availability, Skills mismatch
Employment equity & Industrial relations	EICV*	HB		5-yearly (last EICV 3 2010/2011)	NISR	Data available to compute some indicators on employment equity.
	Population Census	HB		10-yearly (last 2012)	NISR	Data available to compute some indicators on employment equity.
	Manpower survey	EB	Occupation	Once 2012	NISR	Employees' Module: Formal sector employees & persons working in informal sector enterprises - Trade union membership and collective bargaining agreement, Not all employed covered. Did not cover establishment with only one worker.
	Labour inspections	AB	Province, Industry	Variable	MIFOTRA / LMIS	Industrial disputes
Safe work & Social protection	Annual Statistical Bulletin	AB	None, Sex, Province, Sex, Province		RSSB	Benefits & Beneficiaries, Pensions, Occupational injuries
	Labour inspections	AB	Age, Sex, Province, Industry, Occupation	Variable	MIFOTRA / LMIS	Occupational injuries

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
Poverty of employed persons	EICV*	HB	Type of work, Industry, Institutional sector, Frequency of payment	5-yearly (last EICV 3 2010/2011)	NISR	All employed, Employees only
	Annual Statistical Bulletin	EB	None	Annual (last 2010)	RSSB	Monthly income distribution: Contributors only
Labour supply (Other work activities)						
Other labour input into SNA						
Other non-SNA labour input	EICV*	HB	Sex, Age, Sex, Province	5-yearly (last EICV 3 2010/2011)	NISR	Domestic work, Inactivity rate
	Population census	HB	Age, Sex, Residence, Reasons			Inactive population
Labour demand						
Vacancies & Jobs	Manpower survey*	EB	Occupation, Industry, Duration, Educational Requirements, Education field, Recruitment method, Skills required, Jobs created, Provision, Gap	Once 2012	NISR	Vacancies, Jobs, Skills
	EICV	HB	Status in employment, Industry, Occupation, Sex, Age, Province, Residence	5-yearly (last EICV 3 2010/2011)	NISR	Jobs created, Multiple jobs, VUP participants (not analyzed)

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	Sector surveys (ICT, Mining, Energy, Manufacturing, Finance, ...)	EB		Once 2012	ORG / RDB / LMIS	Skills gaps in selected sectors
Costs to employer	Manpower survey*	EB	Status (Permanent/Temporary/Casual), Industry, Type of expenditures	Once 2012	NISR	Labour costs
Establishments	Manpower survey*	EB	Establishment characteristics: Ownership, Size, Location, Province, Training provided, Formal/Informal Sectors & Education, etc.	Once 2012	NISR	All establishments,
			Skills provision, Outputs and enrolments			
						Education establishments
	Establishment census	EB	Establishment characteristics: Ownership, Size, Location, Province, Registration, Keeping accounts, Capital, etc.	Once 2011	NISR	All establishments
	LMIS	EB				From MIFOTRA, RSSB & RRA
	RSSB records	AB	Province, Industry, Institutional sector, Size,	Quarterly (last November 2013)	LMIS / RSSB	All registered employers
						Size classes different from Establishment census
					Not all establishments covered.	

Group	Source	Data type	Disaggregation (as published)	Frequency	Agency	Notes
	RRA records	AB	Province, Industry, Institutional sector, Size	Annual (Last January 2014)	LMIS / RRA	All registered establishments, LMIS adjusted data
Context						
	Economic statistics	EB	Industry	Annual	NISR	National accounts estimates, CPI, Expenditure shares, Investment share
	Child labour survey	HB	Sex, Age, Province, School attendance, Characteristics of work activities & of Head of household	Once, 2008	NISR	Children's economic activities & Child labour
	DHS	HB				

4.2 Assessment of sources of labour market statistics in Rwanda

4.2.1 Source institution: NISR

Data sources: Surveys and Censuses

EICV

The primary survey source for labour market statistics is the Integrated Living Standards Surveys (Enquête Intégrale sur les Conditions de Vie des ménages – EICV). These surveys have been conducted about every 5 years the first one in 2000/01 (EICV1) to the most recent on in 2010/11 (EICV3). The fourth in the series is in the process of being conducted in 2014, following the change in periodicity to every 3 years after EICV3. The assessment in this section is based largely on EICV3, however. Each of these surveys included an extensive employment module covering aspects relating to

- what used to be called “the economically active population”,
- the categories of this population - employed, unemployed and not active, and
- the main characteristics of these categories.

The economically active population consisted of those of working age who were either employed or unemployed. In EICV3, the working age population was taken as all those 16 years old and above, although data was collected for all those 6 years old and above. As data collected directly from children aged 6 to 9 years as well as data collected through proxies are known to be of poor quality, the analysis of data for those below 16 years should be done cautiously. Also, although recommended by international standards, the use of an open-ended upper limit for age has repercussions on the values of some estimates based on the working age population, for example the labour force participation rate.

The identification of persons as employed was based on two reference periods:

- Any work during the last 12 months (with no clear specification of what was meant by ‘any work’);
- Any work, even for one hour, during the last 7 days.

The analysis of the data that was done made use of both reference periods (EICV3 Thematic Report – Economic Activity) but it gave pre-eminence to the long reference period. A similar definition was used to collect data in the previous two surveys, but analysis was done using only the 12 month reference period. It would seem that the national preference for defining employment is that based on the long reference period.

The above definition of employment, based on any work during the last 12 months, is not one of the measurement frameworks in the international standards for measuring

this population. It is an all-encompassing definition that gives recognition to any work that was done for the production of goods and services, as defined in the System of National Accounts (SNA), over the period of 12 months. So the employed are those who 'ever' did some work during the long reference period of 12 months.

It should be noted that though in the publication of the results this type of employment is referred to as 'usual employment'; this is not consistent with the internationally recognized definition of 'usual employment'. The latter, which is no longer recognized by the 19th International Conference of Labour Statisticians (ICLS) in October 2013, is based on the length of period of employment over the 12 months. A person is 'usually employed' if this length is not less than that of unemployment and the total length of employment or unemployment is not less than that of being not active. So many of those classified as 'usually employed' in these surveys would not be so classified according to the international standards which existed then.

The national definition is however particularly useful for analysis of labour input into production (GDP), as it measures total labour input over the same period (12 months) used for compiling GDP. Its challenge is in the fact that, as so defined, unemployment, the flip side of employment, measures 'no work', absolutely zero work, over the 12 month period. Consequently the unemployed population is relatively small and the unemployment rate low.

The 7-day reference period is recognized in international standards and widely used by countries when measuring employment. The definition of the 'labour force' is only in relation to this period. Moreover it is now the only reference period recognized by the 19th ICLS for measurement of employment. Apart from this variable, albeit a very important one, the concepts, definitions and classifications used in the EICVs conform to international standards.

EICV3 captured information on all jobs done by household members over the 12 month period. This is very useful as many characteristics associated with employed persons in fact relate to their jobs: for example occupation, industry, wages, hours of work, status in employment and so on relate to the job. In some instances, surveys limit data collection to what is referred to as the 'main job' or extend data collection to also the secondary and/or tertiary jobs. The EICV is constructed in a way that the 'main job' can still be identified, when necessary. The approach used also allows for analysis of both jobs and persons employed. It is however important not to mix up the two in the analysis. In some instances in the published report, it is not clear whether the tables are referring to jobs, to persons employed or to persons employed in their main job.

The survey is a rich source of data on many aspects of the labour market: employment, labour underutilization and other forms of inadequate employment, hours of work, wages and other entitlements and benefits of employees, the job characteristics mentioned earlier, job search methods for the unemployed and

methods used to secure jobs for the employed, special employment programmes like the VUP and other non-SNA activities of the population. As always, some data collected were not analysed in the publication, and some data needed were not collected. Examples of the former are the wage data, the informal employment data and the VUP data, which were collected but not analysed in the published report. Data on employment in the informal sector was not collected. As seen from the above table, EICV3 is useful for producing most of the statistics of labour supply, in particular and is often the best source.

The results of EICV3 are disseminated in a printed publication using 71 main tables and 4 diagrams with descriptive analysis of each of these. There are also 11 Annex tables. An e-copy of the report is available online through the NISR data portal and public-use micro-data files are available through the National Data Archive (NADA). No other dissemination mechanisms were used.

Population census 2002

The population census collected data on the economic activities of all those 6 years old and above. It should be noted also that collecting data from children aged 6 to 9 years through an administered questionnaire does not usually produce good quality data. It is in fact quite likely that the responses were not given by the children directly but by proxies. The working age population used in the analysis of the census data was also those 6 years old and above. This is one of the differences between the population census and the EICV surveys which could impact on the statistics obtained from both sources.

In the population census, the economically active population was defined as all those 6 years old and above who were either employed or unemployed. A person was categorized as employed if for that person the response was 'employed or temporarily unemployed' to the question "During the period from 15/07 to 15/08/2002 did have any gainful employment". The person was unemployed, presumably, if the response to the question for the person was 'first time job seeker or jobless'. This definition differs from the two used in EICV, and so the results are likely to be affected. It is also not the same as the then international standard definition of employment.

The main variables for which data were collected in the population census were economic activity status (active employed, active unemployed and not active) as well as the following characteristics of the main job: occupation, status in employment, industry and institutional sector. Used along with other variables in the census, these statistics relating to labour supply could be disaggregated by many factors such as educational attainment, sex, age, province, residence etc.

As acknowledged in the thematic report, 'Analysis of results, Characteristics of the economically active population', the population census data is not expected to be of the same quality as the data from EICV for various reasons. One of these is that the

form of questioning used to categorize the population into the activity status groups (employed, unemployed, inactive) is such that it would have provoked many misclassifications. Nevertheless, the data is still useful in the following context:

- When the economic activity status is used as a cross-classificatory variable explaining the observed phenomena from the other census variables;
- When detailed disaggregation statistics are required for geographic variables (e.g. at sector or village level) as well as for occupation and industry (to 3 and 4 digit levels);
- When good quality statistics on the economically active population are not available from other sources.

As highlighted above and in particular for computing many of the related labour market indicators, the population census is a source of statistics on labour supply. However, the analysis of these statistics should take note of the above limitations in the data. In particular, any comparison or joint use of values of these statistics or indicators with those from EICV should be done with caution.

The thematic report was produced in 2005 for data collected in 2002, a gap of about 3 years. Although this is not unusual for the analysis of economic characteristics from population census data, it means that the results for those statistics that are volatile, like the unemployment rate, are largely historic. The results for structural statistics like the distribution of employed population by industry/occupation would however still have some relevance. The thematic report and many additional tables can be viewed and downloaded from the NISR portal and public-use micro data can be obtained from NADA. Although the population census results are usually released with great fanfare, this does not always translate to the thematic reports. So awareness of these valuable statistics by researchers and the population at large may be limited.

Establishment Census

The establishment census took place in 2011 with data collection done in 2 months. The analysis was based on 91 tables and 10 diagrams. It is worthy of note that the report was published by August 2011, a remarkable achievement, all the more so as this was the first establishment census in Rwanda. The establishment census collected data on the sex and nationality of the owner, working status, place of work, institutional sector, industry, legal status, registration, type of taxes, keeping of regular accounts, capital and number of employees according to education, sex, nationality and type of contract. The objectives were to provide (i) a comprehensive profile of economic activities of establishments in Rwanda towards establishing a business register; (ii) statistics based on the above characteristics of the establishment and their employees; (iii) data for use in classifying establishments by size and identifying them as being in the formal or informal sectors.

A clear definition of an establishment based on international standards (ISIC) was adopted. However certain establishments were excluded a priori from the compilation. These were those operating from within households and so not visibly identifiable, those that were itinerant in nature such as transport drivers, those that were temporary and roads and buildings construction sites. An important point to note is that the census was of establishments and not enterprises. Several establishments may belong to the same enterprise and an establishment may be an enterprise in itself. As presently constructed, the questionnaire used for the census cannot be used to return statistics on enterprises, not even the number of enterprises.

The challenge is that since 2011 no effort has been made to maintain the register of establishments from the census exercise. Some of the identified establishments in the census register may no longer exist and quite a few new ones may have been created. So the value of the listing of establishments in the census is decreasing over time.

Manpower survey

This first manpower survey was implemented in 2011 within the context of a common EAC project. It was a multi-faceted survey aimed at collecting data from establishments as well as from employees within these establishments. Establishments were sectorised into (a) formal sector establishments in the private sector and those in the public sector; (b) informal sector establishments; (c) education/training institutions. In each of the first two of these sectors, a sample of establishments was selected and data collected using an employer module. A separate module was used for the heads of the education/training institutions. In each of the selected establishments in sector (a), a sample of employees was selected for direct data collection using an employee module. In the other two sectors, a census of employees in the selected establishments was enumerated using the same employee module.

The employer's module collected data on the establishment's characteristics, the characteristics of the employees as reported by the employer, the total number of posts and number of filled posts, total gross remuneration, number and type of vacant posts, future manpower projections and staff development. The employee module collected information on the characteristics of employees as reported by the employees. The module for heads of education/training institutions collected information on the labour, current and future enrolment and training output.

The design is the standard design for manpower surveys but the breadth of topics covered is quite wide. The published reports, in 2 volumes, contain a total of over 750 tables and 212 diagrams. These provide a rich source of statistics on both labour demand and the employment component of labour supply. As indicated in the table above, this survey is often the best source for labour demand statistics and for some groups of labour supply statistics.

However the survey did not cover all establishments or all employees. Establishments with only one worker were excluded, which means most own-account establishments were excluded. Also the statement “Politicians, military and police forces were not considered as employees.” in the reports suggest these persons were also not included. It is not clear whether their establishments were also excluded.

The sampling frames for the establishments were (i) Civil servant census for the public sector establishments; (ii) 2011 Establishment census for the private formal and informal establishments; (iii) MINIEDUC Schools database for primary and secondary schools; (iv) High Education Council database of higher type of learning institutions; and (v) TVET database from WDA for TVET schools. Different sample designs were used to select establishments from these frames. Details on weights and estimation methods are provided as well as precision estimates for key indicators.

The reports are available in print form as well as e-documents in the NISR portal. Micro data files can be obtained from NADA.

National Child Labour Survey, 2008

The purpose of this survey was to provide estimates on the extent of child labour for use in developing appropriate strategies for its elimination. It was directed at collecting data on the economic and non-economic activities of children (aged 5 to 17 years) and the impact these may be having on their education, health and development. It was a household based sample survey using the standard two-stage design of enumeration areas selected with probability proportional to size and households within each enumeration area selected with simple random sampling. Note children not living in households were excluded by virtue of this approach. As usual for such surveys, questionnaires were addressed to adults as well as to children. They collected data on the characteristics of the household, the head of the household as well as the children. It was an ad hoc survey to properly measure child labour using the international standards for collecting statistics on child labour.

Informal Sector Survey, 2006

This first survey of informal sector enterprises was essentially an enterprise survey directed at generating data mainly about the enterprise itself to serve national account purposes and decision making about enabling the activities of the enterprises. In this context data on the size and characteristics of the persons engaged in the sector were also collected. These included age, sex, nationality, status in employment (owners, permanent employee, and temporary employee), geographic location, industry and income. The survey had challenges relating to the definition of the informal sector and to the lack of any previous experience of such a survey. It excluded ambulant operators and those operating from within their households, away from any specified location.

4.2.2 Source institution: Rwanda Social Security Board (RSSB)

Data source: Administrative records

Enterprises employing staff are obligated by law to pay social security contributions for their staff to the RSSB. This process entails submitting data on both the employer (employer members) and the employees (contributors) at registration and subsequently every quarter. The data covers the socio-demographic and geographic location characteristics of the employer members and the contributors, the socio-security characteristics of the establishments, their size, industry, institutional sector and occupational injuries, the monthly income of contributors and their nationality. RSSB itself has data on beneficiaries, amount paid as benefits, and on pension beneficiaries.

The data is used by RSSB to produce statistics on employer members and contributors which are submitted to LMIS regularly as quarterly statistics (most recent, November 2013) and published in their Annual Statistical Bulletin as annual statistics (most recent, 2009-2010). As noted in the above table, these statistics fit into different areas of the framework on both the labour supply and labour demand sides. They are particularly useful with respect to their wages statistics. The major challenge in using them is that the coverage of establishments and of employees seems to be low when compared to other sources such as the Rwanda Revenue Authority, the Rwanda Development Board, the 2011 Establishment Census (although this last covered establishments and not enterprises) and estimates from EICV. The under-coverage is estimated by the LMIS as ... for the enterprises and ... for the employees. There are also issues relating to inaccurate reporting of age and unique identification of enterprises. The usefulness of the statistics is thus limited by these constraints. Nevertheless, it can be assumed that trends in their values over time follow the same pattern as for all enterprises and so reveal good information on growth rates relative to the latter.

The dissemination of the RSSB statistics is through their printed publication and the LMIS website.

4.2.3 Source institution: Rwanda Revenue Authority

Data source: Administrative records

All enterprises are obliged by law to pay various forms of taxes relating to the business and to the income paid to employees of the business, if any. The latter is done through a Pay As You Earn (PAYE) system in which employers submit details of their employees who are taxable and the amount of tax deducted at source from their pay. Employees who earn below RWf 20,000 per month are not taxable and so their details are not included in the information submitted by the employers. Although individual records are submitted by employers for each of their taxable employees, these are not

captured into the RRA database and are used only for periodic audit checks on employers. Only aggregate information on numbers of employees and numbers of enterprises is available. These can be disaggregated by the geographical location of the enterprises, their industry, institutional sector and the status in employment of the employees (regular/temporary). However the categorization by industry is not reliable due to serious and frequent errors in the way enterprises self-classify themselves. Employees with multiple jobs are also identified.

For own-account enterprises without employees, their tax is based on their profits and processed through another system, PIT. Details are therefore available on some of the owner's characteristics and their profits, which can be taken as their income.

The RRA generates statistics relative to the enterprises and the employees from their database which are submitted to LMIS for dissemination on their websites. The statistics that are disseminated are however LMIS-adjusted statistics in order to remove outliers in the reports submitted by RRA. The usefulness of these statistics would be enhanced if individual employee records were available for use in the analysis as their individual characteristics could then have been used to disaggregate the statistics further. This is particularly important with regard to the income statistics that could be derived from such the RRA records. Also there is some under-coverage due to enterprises not registering as required by law and some under-reporting of employee numbers and income by enterprises wishing to minimize the amount paid as tax. The extent to which these happen is shown in the LMIS analysis which shows

4.2.4 Source institution: Ministry of public service and labour (MIFOTRA)

Data source: Reports of labour inspectors

Labour inspectors, located in every district, send in data collected during inspections of establishments in their district. The data sent enable the production of statistics on the characteristics of employees such as wages, education, occupation, age, sex, nationality, geographical location, type of establishment, industry and access to social protection as well as on the characteristics of the enterprises, including compliance to labour laws. One limitation with respect to these statistics relates to coverage of establishments and their employees. Although the aim is to cover all establishments listed during the 2011 establishment census, difficulties are experienced tracking some of the establishments and the workload of the inspectors is heavy. Another limitation comes from the use of very different reporting periods by the inspectors, which makes aggregation a challenge. These periods can vary by over 12 months. Further, the completeness and accuracy of the data collected during inspections may be affected by deliberate actions on the part of the employers and/or the employees as well as the amount of time available for the visit.

Data source: IPPS

This information system located in MIFOTRA has information on all public servants, both current and former, relating to their age, sex, field of education, level of education, contract details, wages, location of their institution, performance and disciplinary records. It would seem the data is however not used for any statistical purposes.

4.2.5 Data source: Department of Migration and Immigration

The Department submits statistics on migrant workers on a monthly basis to MIFOTRA. The tables include classifications by age, sex, nationality, occupation, education level, income and province. There is some issue about the classification used for industry between the Ministry and the Department.

The statistics from all the above data sources are submitted for dissemination on the LMIS website.

4.2.6 Source institution: Rwanda Development Board (RDB)

Data source: records from registration of enterprises

The Department is responsible for registration of new businesses during which information is collected about persons to be employed in these enterprises. Based on these records, the Department produces statistics on registered enterprises and on the characteristics of persons to be employed, including on their nationality. These are submitted to LMIS for dissemination.

4.2.7 Source institution: Ministry of Education (MINEDUC)

Data source: annual census of institutions

Each year the Ministry collects data at all levels of education. These levels are pre-primary, primary, secondary, vocational training centres and tertiary and include both private and public institutions. The data collected includes enrolment at all levels, field of study at senior secondary level, exits from the secondary system, type of qualification enrolled for at the tertiary level, staff and key services. Wherever applicable, the data is disaggregated by sex, type of institution (private, public) and disability status. Data is also collected on participation in adult literacy. Questionnaires are used for data collection from institutions at all levels below tertiary whilst data is collected directly from tertiary institutions.

The annual statistics are disseminated in a yearbook, the most recent of which was in 2013 relating to data for 2012. It contains 42 main tables, 29 annex tables and 20 diagrams. Historic data is used in the yearbook to analyse trends. The statistics are also submitted to LMIS for use in their website.

4.2.8 Source institution: Workforce Development Agency (WDA)

Data source: Administrative records of institutions

Data is collected jointly with MINEDUC covering vocational training centres, technical secondary schools and post-secondary technical polytechnics. The data covers enrolment, teaching staff, type of school, infrastructure and equipment. The statistics produced are disseminated through MINEDUC.

4.2.9 Other institutions

Labour statistics are produced by some other institutions such as the LMIS of RDB and the Institute of Policy Analysis and Research (IPAR) through targeted topic-specific surveys. Examples are the surveys on women economic empowerment, governance frameworks and performance contracts done by IPAR and their school-to-work transition survey which is now being implemented. LMIS is conducting an establishment survey on new jobs created over the last 5 years. The statistics generated from these surveys are used primarily for analysis and are not always part of the publically available network of labour statistics.

Chapter 5: Bridging the Gap

From the previous sections, it is evident there are a plethora of data sources in Rwanda for the production of labour statistics for all of the thematic groups in the structure of the labour statistics framework. The challenges in using them relate to

- the incomplete coverage,
- inconsistent concepts, definitions and classifications,
- different data collection methodologies,
- poor quality of some of the sources,
- variability in frequency of collection and dissemination,
- lack of coordination, especially between the producers of administrative statistics, and
- full exploitation of the potential of administrative sources.

Many of the producing institutions are already taking steps to further improve their activities for producing quality labour statistics.

5.1 NISR

The institution plans to institute an annual labour force survey from 2016, an annual integrated business survey from 2014/15, a 3-yearly establishment census from 2017 and to continue its 3-yearly EICV, the current one, EICV4, being conducted now in 2014. These will be in addition to its other survey and census activities that are not directly related to the labour force. Taken together these surveys and census would go a long way to bridge the gaps with respect to labour supply statistics and labour demand statistics.

5.1.1 The Annual Labour Force Survey

The institution plans to start annual labour force surveys as from 2016. As noted earlier, this is the best source for labour statistics relating to persons in the labour force, especially labour supply statistics. Properly designed, it has the potential to provide good quality data for statistics in all groups of the labour supply categories in the labour statistics framework as well as some of the labour demand groups. In terms of completeness in coverage, accuracy of measurement and scope of topics, the labour force survey will be preferable to the EICVs for generating these statistics. Given the wide topic scope of the latter,

- the range of labour market variables that can be included is limited;
- the concepts, definitions and classifications used to measure the labour market variables may not be consistent with international standards;
- the training and supervision of enumerators cannot be as rigorous; and

- the smaller sample size required to keep interviewing time for all the many survey topics within reason and resources reduces the precision of some of the labour market estimates, especially at lower levels of disaggregation.

Although NISR has developed a good experience in conducting household surveys, it may be useful to initially limit the ambitions of the labour force survey. For example, the ideal in order to measure stock as well as flow statistics is to use some form of panel design. Initially, it may be advisable to implement a one-off sample survey but with the sample subdivided into 2 nationally representative sub-samples implemented in 2 semesters to capture seasonality. Then, over the latter few years, the periodicity can increase to quarterly or monthly nationally representative sub-samples. The ultimate objective of a continuous survey using a panel design should be deferred for now.

The survey should as much as possible use concepts, definitions and classifications consistent with international standards, particularly with respect to the key and basic variable of labour force status (employed, unemployed and out of the labour force). In this regard, it will be necessary to take into account the recently adopted international standards for the measurement of all forms of work. However, in order not to overload the questionnaire on an annual basis, it may be useful to use a rotating modular approach to cover some of the forms of work. A core module for employment-work, and possibly work for own-use production of goods, should be implemented each year. The definition of employment as an unspecified 'any' work over a 12-month period used in EICV should not be adopted for the labour force survey, nor should that of the 2002 population census.

In addition to the core labour force status variable, data should be collected to measure labour underutilization and its components of time-related underemployment and unemployment and the potential labour force. Measuring other forms of inadequate employment would also be useful as a proxy for low individual labour productivity. The survey should collect information on the characteristics of the employed including the standard ones of industry, occupation, status in employment and institutional sector. It should extend this to cover benefits and entitlements so as to measure informal employment and conditions of work of the employed population.

Two important but challenging topics should be measured as best as possible. These are employment in the informal sector and income from employment. For the former, the questionnaire and survey design should provide for adequate information on the characteristics of persons engaged in such enterprises over and above on the characteristics of the enterprises themselves. This is on the assumption that the policy issue of prominence is employment in informal sector enterprises. In EICV and the 2006 Informal sector survey, this was not the case. Greater emphasis was given to the characteristics of the enterprises such as output, financing mechanisms, operating characteristics and support mechanisms. It should be noted, however, that when approached from the position of persons working in informal sector enterprises as

proposed earlier, there is a risk of double counting of enterprises. The design used should therefore depend on the purpose of the statistics required. If interest is in the informal sector enterprises, such as estimating the number of such enterprises, the design used in EICV and the 2006 Informal sector survey is preferable. Accurate data to measure income from employment, especially from self-employment, can be difficult to collect in a labour force survey. It is however necessary to do so, conscious of the limitations of the data collected. A useful approach is to use different methods for income from paid employment and for income from self-employment. The former can be analysed with much greater confidence than the latter. In some instances, a household enterprise module is used to obtain the income of the self-employed as the mixed income of their enterprises.

Other topics that can be covered rotationally are data on occupational injuries and diseases, membership of trade union and employer's organization, pension receipt, access to employment services and experiences in industrial relations.

5.1.2 The annual integrated business survey

Establishment surveys have been acknowledged above as the best source for statistics in all the thematic groups of the labour statistics framework on the demand side. This is demonstrated by the wealth of labour market data from the 2012 manpower survey that can be used as indicated above for these groups. The proposed integrated business survey could therefore provide the necessary data for these groups on an annual basis from the best source for such data. Although it will not be at the same level of detail and scope as the manpower survey, it is expected that sufficient information on persons employed in the selected businesses will be available. This is one of the major challenges in integrated surveys dealing with many topics, as discussed in the previous section for the EICV.

The establishment can only provide aggregated data on its employees such as their distribution by sex, nationality, occupational groups (possibly), training provided, qualification levels, income groups (possibly levels) and so on. In addition, information can be provided on variables common to the business and the employed persons such as industry, institutional sector, formal/informal categorization, geographic location. The establishments may also be able to give information on vacancies and newly created jobs, but the disaggregation of these may be limited. Information on training provided and missing and mismatched skills would be useful but may be challenging. Statistics on the establishment itself such as size, type of ownership, characteristics of owners, output and plans for future expansion should be available.

It may be useful to consider a modular approach in which modules on specific topics are attached to the core rotationally. Given there are no plans to repeat the manpower survey, it may be possible once every 3 to 5 years to attach a manpower-like module along the lines of the employer's module of the 2012 manpower survey to the core establishment questionnaire. In addition a sub-sample of establishments can be

selected once every 5 years so that a shortened form of the employee module can be administered to a sample of employees.

For the annual integrated business survey to be successful, careful attention should be paid to maintaining a good establishment register. This would require close collaboration between NISR and other institutions interested in using such a register and possible use of institutions operating at district and sector level. It may be useful to consider supplementing or complementing these activities with some form of area listing of establishments.

The 2012 manpower survey excluded establishments with only 1 worker. The reason for doing so was however not presented in the reports. It may be useful to review the decision for the integrated business survey, as otherwise many own-account establishments will not be included in the survey. The survey also excludes ambulant businesses and those operating from within the household with no fixed identifiable location elsewhere. Whilst this is understandable in terms of the limitation of the frame of establishments, it may be useful to use other ways to get similar information about the omitted enterprises; for example a module on household enterprises attached to a labour force survey or to EICV.

5.1.3 3-yearly establishment census

The 2011 establishment census was well designed and successfully implemented, although it was quite a hectic exercise over a period of about 6 months. Repeating this activity every 3 years may however be quite demanding in terms of human resources, given the other old and new activities being planned by NISR. A 5-year periodicity may be more attainable. The data collected in 2012 could not be used to link up establishments with their parent enterprises. Having information on the number of enterprises in the census could serve as check for under-coverage of data from institutions collecting data at the enterprise level, e.g. RSSB and RRA.

5.1.4 3-yearly EICV

With the introduction of the annual labour force survey, the employment module in EICV should be much reduced but not completely eliminated. It will still be necessary to have data to categorize the population by their labour force status. This will enable the cross-classification of labour force status against other variables from the survey such as the poverty status of households. This is in fact the only source for producing good quality statistics on the working poor, an MDG indicator. In addition, it would be necessary to also continue using the 'at least 1 hour in 12 months' measurement method for employment to link up the results with the previous EICVs until a sufficient number of overlapping labour force surveys have been conducted.

The analysis of the EICV4 should give pre-eminence to the 7-day reference period over the 12-month period to produce statistics according to international standards. Nevertheless, the relationship between them should be examined by analysing a table

of employment statuses classified by the 12-month framework versus the 7-day framework. This would give the basis to better understand the implications of using one or the other. An issue that would need to be resolved is the extent to which the analysis of characteristics such as occupation, industry etc. should reference the job done in relation to the 12-month period or to the 7-day period. EICV3, as the other EICVs before this, lays emphasis on the former. The analysis of the data should also clearly distinguish between statistics based on jobs and statistics based on employed persons, both of which can be done from the data collected.

5.1.5 Dissemination

NISR uses printed publications and websites to disseminate its results. Micro data from the surveys and censuses can also be accessed through NADA. Yet, from the user satisfaction survey conducted during the preparation of NSDS2, many users expressed dissatisfaction in particular with access and availability of NISR employment statistics. This disjuncture between the actual situation and the one perceived by users may be due to lack of awareness by the users of the existence of the results, despite the release timetable on NISR's internet homepage. The existing methods are passive and depend on users going out to seek the results by obtaining publications or consulting the website. Also, although there are news flashes of NISR statistics on its internet home page, it seems none are on employment statistics. A different strategy may be needed to push out employment statistics to users. One possibility is to actively and continually engage the media on the results that are available and on the implications of these results for the way of life of Rwandese. Not all the results have to be pushed out at the same time. Emphasis should be on continuing presence in the media by slowly releasing the results from the same source over time.

The use of results published on the NISR website and micro data from the surveys and censuses should be monitored in order to assess the extent of usage of the statistics. In particular, it may be useful for NISR to engage directly with users, including the media, policy-makers, researchers and politicians,

- to promote a good understanding of the results;
- to improve awareness of those that are not being consulted; and
- to encourage further analysis of the available data.

5.2 RSSB

Normally, social security institutions are a good source of statistics to monitor trends in wages. Although they have limited coverage vis-a-vis the employed population as a whole, the trends in the wages of their contributors may mimic that in the wider population. They are also a good source of the number and characteristics of beneficiaries and benefits, especially of pensions and claims resulting from occupational injuries. The limitations in their use come from the under-coverage of

enterprises, the under-reporting of employees to minimize contributions. These are in fact precisely the limitations in the statistical production activities of the RSSB. This affects the usefulness of the statistics produced for general analysis of the labour market. An improvement in coverage and reporting would benefit both RSSB and the labour statistics system.

5.3 RRA

The data collected have the same limitations as those of RSSB with respect to under-coverage and under-reporting, but probably less so. The data processed is however limited to those aspects of direct interest to the tax authorities, which is surprising since reportedly the data are submitted electronically. It would seem that individual data records of employees submitted by employers under the PAYE system are not used to generate statistical tables, even though they are collected. They are used principally for audit checks. This severely limits the possibilities for statistical analysis. Another challenge in using the RRA data, as well as those of RSSB, is in the classification of enterprises by industry. The quality is poor. The existence of a national coding index for industries should greatly improve this classification. Other challenges are that not every employee is taxable, some enterprises may be exempted from national business tax (they only pay local tax at district level, for example) and there is a tendency to under-report income.

Despite the above challenges, RRA administrative sources could provide good data on the number of paid employees, the number of the self-employed and their income (levels and distribution) classified by various person and enterprise characteristics. These are useful for producing indicators such as low-income incidence, inequality of employment income, average income of persons at very low levels of disaggregation by geographic location, occupation and industry. The availability of these data at the required level would go a long way to filling the gap between the data required for some labour demand statistics and the data available to do so. Means should be found to persuade RRA to produce statistical tables using individual records of employees in order to profit from their data to the maximum. One possibility is for NISR to work with RRA to develop an appropriate software application for generating the required tables from the individual records. Then the demands on RRA to actually produce the tables will be routine and much reduced.

The introduction of a unique PIN for businesses across various data producing institutions should positively impact on coverage both for RRA and RSSB.

5.4 MIFOTRA

To contribute to bridging the gap between what is available and what is desirable the labour inspector reporting system needs to be upgraded. Steps that could be taken include increasing their number, planning their operations to have reports sent in at

regular intervals, streamlining their operations, developing common understanding of the variables on which they are reporting to ensure consistency across reporters, etc.

As the proposed secretariat of the coordinating unit for NEP, the Monitoring & Evaluation unit of MIFOTRA should develop simple project and programme monitoring indicators that can be used at the most disaggregated geographical level. The country's administrative structure has a presence at village level that could be used to quickly collect local level data for these indicators. A mobile telephone based system could be developed for fast transmission of data on key variables. For this purpose, the indicators selected should be simple with a limited number of response options. NISR, as the coordinator of the national statistical system, should work with the MIFOTRA and the Ministry of local government to develop these indicators and the reporting system. A pilot study will be necessary.

The rich data set on public servants, IPPS, is not exploited for statistical purposes. Even though coverage is limited to public servants, the analysis of the data in this system could still provide useful insights on the employment situation in Rwanda. The Ministry should therefore make an effort to analyse the data.

The Ministry uses LMIS as its dissemination mechanism for the statistics produced from the records of labour inspectors and from the submissions of the Migration department. It would be useful to have some publication, like a yearbook, in which some analyses of the statistics are presented, along with the proposed analysis of IPPS data.

5.5 RDB

Enterprise registration data are useful for maintaining the establishment register and aiding coverage by RSSB and RRA. NISR, RSSB and RRA should examine the means of doing so. The data provided on employees are not of much use beyond that of the institution itself, if at all.

5.6 MINEDUC

It is important to continue with the development of the computerized student and teacher system as this will facilitate the production of statistics on enrolment, exits and qualifications. The Ministry should collect and process data on field of study at VCTs and other TVET institutions to provide statistics on the nature of skills availability for these levels. Output data at all levels, both successful exits and drop-outs, are important and should be provided.

5.7 WDA

The planned tracer study should provide important information on skills mismatches, provided it is properly designed and managed. The Authority should endeavour to repeat it every 3 to 5 years.

5.8 Other Institutions/sources

Data from the targeted surveys and other data collection activities should be treated as public and made available to all who wish access to it. NISR, as the agency giving visas for these activities, could make this a condition for issuing these visas.

LMIS and IPAR should work closely with major producers to improve primary data collection. Other partners in the labour statistics framework should be kept informed of plans for targeted surveys either by NISR as the visa issuing authority or by the implementing institution.

5.9 National Statistics System (NSS)

The NISR, as the coordinating institution for the NSS, should put in place adequate coordinating mechanism for labour statistics across the major producers. This could build on the recent joint workshops and meetings that have been organized in the context of the development of NSDS2, introduction to the new international standard for measuring employment and the development of the labour statistics framework.

The mechanism should be at informal, technical and policy-making levels. Informal e-contacts could be encouraged through an exchange of email addresses and other electronic contact information between focal points (statisticians) from the major producers. This would enable quick exchange of information on activities, mutual help in the implementation of these activities and quick responses to demand for statistics. This informal system should be supported by regular formal meetings of this technical group, possibly every 6 months. Then, depending on needs, this technical group should report to a meeting of senior policy-makers of their respective institutions.

There are many person, household, posts and enterprise characteristics that are common not just across the labour statistics system but the entire NSS. These relate to concepts, definitions and classifications used across the NSS. It may therefore be useful to develop national equivalents for use by all producers in the form of a dictionary of concepts, definitions and classifications of labour market-related statistical variables in Rwanda. In particular with respect to the classification of industry and occupation, the development of coding indexes could have a positive impact on accuracy, consistency and ease of coding of these variables.

Chapter 6: Programme for the Production of labour market statistics for the RLSF (2014/15 – 2019/20)

Part I: Situation Analysis

The EDPRS2 has identified job creation as crucial, especially for the growing youth share of the population. Further, policies and programmes that have evolved out of EDPRS2, especially the National Employment Programme (NEP) awaiting final approval, have objectives which depend on the availability of good labour market statistics. This importance of labour market statistics is consequently highlighted in the National Strategy for the Development of Statistics (NSDS2). It however notes that there are still some lacunae in the statistics required to make evidence-based decisions, even though a wide range of these statistics are being produced in the National Statistical System (NSS). In response to this and as a follow up to the proposal in NSDS2, NISR as the coordinator of NSS embarked on the development of a “Labour Statistics Framework for Rwanda (RLSF)”.

The proposed RLSF, whilst recognizing the particular needs of EDPRS2 and NEP, is based on an all-encompassing approach to organizing labour statistics in Rwanda. In this light, labour market indicators have been identified, prioritized and described in a Metadata Handbook within the context of a structure for the statistics required to compute them. The choice of indicators also takes into account the reporting obligations of Rwanda to regional and international systems such as the MDGs, East African Community and the International Labour Organization. The RLSF examines the ideal data sources for these statistics, identifies and assesses the existing data sources and recommends ways of moving from the current towards the ideal through the achievable. Amongst the challenges noted in the RLSF as faced by the existing sources are:

- incomplete coverage,
- inconsistent concepts, definitions and classifications,
- different data collection methodologies,
- poor quality of some of the sources,
- variability in frequency of collection and dissemination,
- lack of coordination, especially between the producers of administrative statistics, and
- poor exploitation of the potential of administrative sources.

The programme for the production of labour market statistics is the first step in implementing these recommendations. The programme responds to the identified lacunae in the existing labour statistics system along the lines of Strategy 1.2 and 1.3 of NSDS2. It recommends (i) the use of a judicious mix of surveys, censuses and administrative sources to meet the above data needs; (ii) aggressive dissemination of

the results; and (iii) organization of the labour statistics system within the NSS, as proposed in NSDS2.

The SWOT analysis done in NSDS2 also applies to this programme. During the recent years, NISR and partner institutions have successfully carried out a number of important statistical exercises, which has built up considerable confidence and experience of their specialists in the implementation of household surveys and use of administrative sources. However, the staffing and other resources required to take on additional surveys and other activities are a challenge. The 2012 user-satisfaction survey identified the dissemination of labour statistics as the weakest amongst all the statistics systems. At the same time, the approval of NSDS2, the successful implementation of NSDS1, the existence of national policies and programmes such as EDPRS2 and NEP as well as the commitment and enthusiasm of their staff have created windows of opportunities for the successful implementation of the programme. Provided the resources are available and the institutions do not over-extend themselves, any threats to implementation of the programme will be containable.

Part II: Sub-Programme A – Production of labour statistics from Surveys and Censuses (2014/15 – 2019/2020)

II.1 The annual labour force survey (Responsible agency: NISR. Collaborating agencies: MIFOTRA, MINICOM)

As already indicated in NSDS2, NISR has decided to institute an annual labour force survey (LFS) as from 2016.

The LFS will be wide-ranging covering topics through both an annual core module for employment work and own-use production of goods and specialized 2 to 3-yearly rotating modules for other forms of work and some other topics, as follows

(iv) Questionnaire	(v) Topics
(vi) Core	(i) population; labour force status; education and training; (ii) employment and labour underutilization, including unemployment, underemployment and the potential labour force; Other inadequate employment situations; (iii) Characteristics of the employed such as industry, occupation, status in employment, institutional sector, hours worked, employment in the informal sector, informal employment; income from employment (main and secondary jobs) (iv) Participation in own production of goods
(vii) Module 1	(iv) other forms of work such as unpaid trainee/apprentice work, volunteer work and own-use production of services (domestic work)
(viii) Module 2	(v) work experience of the employed such as method used to find a job; (vi) access to employment services and characteristics of previous job of the unemployed and those out of the labour force.
(ix) Module 3	(vii) safe work (occupational injuries and diseases)

The LFS will as much as possible use concepts, definitions and classifications that are consistent with international standards, especially for the basic labour force status variable. When designing the survey, account will be taken of the new international standards for measuring employment.

Preparatory activities for the survey will start in 2015 with field operations commencing in first half of 2016.

For the first 3 years of implementation, the sample will be divided into 2 nationally representative sub-samples with the sub-samples being administered 6 months apart to account for seasonality. Depending on experience gained, the frequency will then be increased to 4 (quarterly sub-samples) to produce quarterly national level estimates of key indicators. This increase may require a reduction in the above scope of the survey so that results can be processed in time and reports produced. One possibility could be to have the smaller surveys during 3 quarters and to include the omitted topics once a year in the 4th quarter. There are several country examples that could be studied in making these decisions. Sometime much later, when NISR has gained sufficient experience in using panel designs from the EICV, the LFS design could upgrade to a continuous panel survey.

II.2 The 3-yearly EICV (Responsible agency: NISR. Collaborating agencies: MIFOTRA, MINICON, PSF)

NISR intends continuing the EICV on a 3-yearly basis starting from EICV4 in 2014. With the introduction of the annual labour force survey, the employment module used in these surveys (up to the current EICV4) will be reduced, but not eliminated. Some information on the basic labour force status of individuals; the employed and unemployed population; and the characteristics of the employed population such as industry, occupation, status in employment, institutional sector; income from employment (for all jobs) will still be collected. This is particularly important to be able to cross-classify labour force status with other survey variables, such as poverty status of households. The EICV is in fact the only survey source for producing good quality statistics on the working poor, an MDG indicator. Its usefulness is also in terms of generating the above data for all jobs, which will not be done in the LFS. This permits the production and analysis of statistics both in terms of employed persons and jobs.

The EICV will continue using both the 7-day reference period and the 12-month reference period in measuring employment. This will ensure continuity with the previous surveys so as to carry out comparative analysis of the variables of interest over time, whenever necessary. The definition of employment will be in relation to employment work only, following the recent International Conference of Labour Statisticians' standard for measuring employment as only income-generating work. Consequently the same goes for jobs. It will be expected that this new definition will impact on the estimates of employment produced and so raise questions of

comparability with previous EICVs. However, data on other forms of SNA work activities should still be collected, at least for the first 2 or 3 EICVs, in order to overlap with the old definition of employment. The definitions of the working age population and other labour market variables, including classifications, will be consistent with international standards. As much as possible, the analysis will be on jobs, as this is the main strength of this source.

Both the EICV and the LFS will inevitably be organized in the same year on some occasions, i.e. 2017 and 2020. Since all the topics in the EICV are also in the LFS there will be two sets of estimates whenever this happens. Almost surely, there will be differences in the estimates produced from these two sources, even though they will be using the same definition of the working age population, employment and unemployment. The analysis and dissemination processes will need to be carefully managed to avoid confusing users and raising questions about one set of estimates or the other. In so far as it concerns persons, the LFS estimates are the best and will be the only ones recognized as 'official estimates'; for example the official unemployment rate will be that produced from the LFS. In instances when the variables used in cross-classification or other forms of analysis are only available from the EICV, then the EICV results relating to these variables will become 'official estimates'. For example, when analysing working poverty, the resulting EICV results as they relate to the poverty of working persons will be official. In addition, if both estimates are disseminated NISR will explain the reasons for any differences.

II.3 The yearly Integrated Business Survey (Responsible agency: NISR. Collaborating agencies: MINICON, MIFOTRA)

NISR has already designed this survey and it is in the pilot stage. The first full survey will be implemented in 2015 and thereafter annually. It is expected to yield data on jobs (persons) in the sampled establishments, the characteristics of these jobs such as industry, location, hours worked, earnings as well as the characteristics of the establishment. As noted in the RLSF, it is the best source of these and other labour demand statistics.

In the absence of any follow-up plans for another manpower survey, in addition to the survey as planned, a module will be attached to the IBS in 2017 to collect data on training provided, vacancies and their characteristics, labour costs etc. from employers (similar to some of the questions in the employers' module in the 2011 manpower survey). It could also collect data directly from a sample of employees in sampled establishments, on training and skills utilization. In the competing demand for space and time, these factors will not be part of the regular survey.

The success of this survey depends crucially on the quality of the sampling frame and so is linked to projects II.4 and II.7.

II.4 The 3-yearly Establishment Census (Responsible agency: NISR. Collaborating agencies: RSSB, MIFOTRA, RRA, RDB)

The establishment census is being implemented in 2014 and thereafter it will be repeated every 3 years. The periodicity of 3 years will be useful in terms of minimizing the work required to maintain the register of establishments. It is however quite short, considering the many other survey activities planned over the next 5 years. Depending on the experience gained, it may be necessary to consider using a periodicity of every 5 years with intense efforts put into keeping the register up to date through other means as described in project II.7.

II.5 The 5-yearly Sector surveys (Responsible agency: RDB. Collaborating Agency: NISR, MIFOTRA, WDA, Relevant sector ministry, NCBS)

The sector surveys produce useful data on skills availability, skills shortages and mismatches. Another round will be implemented in 2017, 5 years after the last series in 2012.

II.6 The 5-yearly Tracer Studies (Responsible agency: WDA. Collaborating agencies: NISR, MINEDUC, RDB, NCBS)

These studies provide very good information for training institutions, if properly designed. The current study is taking place in 2014. Another one will be done in 2019. The second one will build on the experience gained from the first survey in 2014. Its success would depend on lessons learnt from the survey and design methodology used in 2014. It will be extended to include university graduates.

II.7 The National Statistical System (Coordinating agency: NISR. Collaborating agencies: All major producers)

II.7.1 Establishment register maintained.

Either during or immediately following the establishment census in 2014, NISR will organize an inter-agency team including RDB, RSSB, RRA, MIFOTRA, MINALOC to draw up plans on how to jointly exploit their various sources to maintain the business register. District statisticians and labour inspectors will be invited to collaborate with the Team with respect to their own possible inputs into the exercise. The Team will also explore the possibility of using local tax collectors to provide information on new establishments at local level and on the ones that no longer exist. The working group will use all relevant material on how best to do this from partner countries that already have such registers as well as from regional and international agencies. In particular the manual on business registers developed by the African Development Bank (AfDB) will be studied. Support for this activity will be sought from AfDB. Implementation may involve some study visits to countries which could be identified in consultation with the AfDB. This activity will start in 2015.

II.7.2 National classification of industry

Work that was started to develop this classification will be reignited in 2014 to develop a Rwanda classification of industry consistent with ISIC, rev. 4. This work transcends labour statistics and must bring in partners from economic statistics and relevant sectoral ministries dealing with industry data. If necessary some external technical support will be sought from the UN Statistics Division. Once the classification is established, work will start on the development of a coding index to facilitate the coding of industry both in surveys and in administrative systems.

II.7.3 National classification of occupation

Like the industry classification, the development of a national classification of occupation that is consistent with ISCO-08 will be started in 2015. The work will be undertaken by a technical group including all parties involved in using this kind of classification, especially education and training institutions. Technical support will be sought from ILO, if necessary. A coding index will be developed as soon as the classification has been created.

II.7.4 Rwanda Dictionary of Labour Statistics

The labour statistics sources have many variables in common amongst themselves as well as with other statistics system. In order to promote some level of harmonization of statistics across these sources, as a first step, an exercise will be undertaken to develop and agree on national definitions of some key labour market variables. These may include definition of household; headship of household; standard age groups; classification of establishments as micro, small, medium and large; definition of employment and unemployment; definition of time-related underemployment and potential labour force; and so on. Nothing precludes the national standards being the same as the international standards for some variables. In any case, as much as possible, all of the definitions should be consistent with the international standards, even when they are not exactly the international standards.

The group of statisticians from different agencies who have been participating in the NISR workshops relating to employment statistics will be constituted as the Technical Group on Labour Statistics to implement this activity. Their method of work will initially be informal networking through use of electronic means such as exchange of emails, mobile telephones, etc. NISR will take the lead in promoting these exchanges, starting in 2014.

II.7.5 Rwanda Labour Statistics Council

The possibility of creating a formal body at policy level of all major producers and users of labour statistics will be examined. This body will be the sectoral Sub Working Group referred to in NSDS2. It will be part of the NSS, reporting to the Steering

Committee of NSDS2. It will receive technical support from the Technical Group created in II.7.4, which will itself then take on a formal role in this capacity. It is expected that this system will greatly improve coordination across the RLSF, avoiding overlaps, duplications and gaps. The study of this possibility will start early in 2015 and a decision taken before the end of 2015.

II.7.6 Labelling of official labour statistics

In its capacity as coordinator of the NSS and the institution responsible for giving the go ahead to non-NISR survey activities through the visa system, NISR will consider the need to go one step further by accrediting certain statistics as 'official Rwandan statistics' provided they meet certain criteria. This will not be an attempt to prevent other statistics being produced and disseminated, but one directed at assuring the public at large, especially those outside Rwanda, of the quality of the statistics being disseminated to them. Accreditation will be at the request of the producer of the statistics. The system, currently used in the UK statistics system will be studied in 2015 and a decision made by mid 2016.

Part III: Sub-Programme B – Production of labour statistics from Administrative Sources (2014/15 – 2016/17)

III.1 Statistical tables based on RRA employee records (Responsible agency: NISR. Collaborating agency: RRA, MIFOTRA/LMIS)

Data on individual employees are submitted electronically to RRA by employers in connection with PAYE tax payments. These data are however not used to produce statistical tables based on the characteristics of these tax payers. Thus only a few basic tables of taxpayers by industry, location and institutional sector are disseminated.

In the project, NISR will work with RRA and other collaborating agencies to develop a software application for constructing tables based on RRA individual taxpayer records. RRA can then routinely use this application to generate a wide range of statistical tables. This project will start in the second half of 2014.

III.2 Unique identification number for enterprises (Responsible agency: NISR. Collaborating agencies: RRA, RSSB, MIFOTRA, RDB)

Activities are already being implemented to develop a system for assigning unique identification numbers to enterprises. The project will give impetus to this procedure so that it can achieve results soon. It is expected that RSSB and RRA will then be able to take necessary steps to improve their coverage of enterprises and employees. The project will end by mid-2015.

III.3 Labour inspector census module (Responsible agency: MIFOTRA/LMIS. Collaborating agencies: NISR, MINALOC)

The project will take steps to use standard reporting period (quarterly) for all data submissions from the labour inspectors. A training workshop will be held with labour inspectors to (a) improve their understanding of the concepts and definitions that will be used when recording information in establishments; (b) agree on suitable methods for extracting the information from the enterprises. This will start in 2015.

III.4 IPPS data (Responsible agency: MIFOTRA. Collaborating agency:)

The IPPS data will be used to regularly, possibly quarterly, produce statistics on employment in public services disaggregated by socio-demographic characteristics, occupation and income. The start date for this project will be second half of 2014.

III.5 Local level data for M&E of NEP projects (Responsible agencies: MIFOTRA, MINALOC. Collaborating agency: NISR)

As the host of the Secretariat for NEP, MIFOTRA working with MINALOC will develop a system for quickly accessing local level monitoring and evaluation data. With guidance and assistance from NISR and LMIS, suitable indicators will be identified depending on the nature of the NEP project. These will be such that data responses can be easily transmitted through a mobile reporting system.

The mobile reporting system will be developed with assistance from LMIS. The reporters at local level will be local tax collectors or some other local staff of MINALOC. The information will be obtained through a mix of observation and use of key informants. Training sessions will be held for these persons to have a common understanding of what will be reported and how. Given the possibility of the phones attracting unwanted attention or used for other purposes, the mechanism will be developed in collaboration with a selected service provider so that the phones are dedicated phones useful for only this purpose. Alternatively, only very cheap mobile phones will be used. The system will have a computerised system for direct receipt of transmitted messages and immediate processing of the information across reporters.

The project will start in the latter part of 2014 with the objective of going operational by the second half of 2015.

III.6 MIFOTRA & LMIS dissemination system improved (Responsible agency: MIFOTRA/LMIS. Collaborating agency: NISR)

The LMIS is the vehicle for disseminating statistics produced by a wide variety of institutions, including MIFOTRA. The development of the web-pages of the LMIS website that are currently showing they are still under development will be completed within 6 months or taken down from the site. As much as possible, more elaborate

metadata will be made available for the indicators that are being disseminated. These activities will be completed by end 2014.

MIFOTRA will take steps to have a regular printed publication with some analysis of the indicator values being disseminated. This will be either an annual publication or quarterly write-ups on specific issues that are current. The publication will be made available on the Ministry's website in pdf format. The first publication will be disseminated by mid-2015.

III.7 Increased data on skills availability from the education and training system (Responsible agency: MINEDUC & WDA. Collaborating agency: NCBS)

Through the newly developed computerized reporting system for all education institutions, data on fields of study will be made available for enrolled students and successful exits at all post-junior secondary levels including VTCs and other TVETs. Exit and transmission data at each level of the pre-primary, primary, secondary and tertiary levels will be disseminated as a guide to the future availability of skilled persons from the system. This will be an annual activity as from 2015.

Part IV: Conclusion

If successfully implemented, the Programme will yield the following outcomes:

- (a) Annual sets of comprehensive labour statistics available for the monitoring of national employment policy and programmes, including in particular the assessment of trends in the creation of jobs, working poverty, shifts in industry sectors, etc.;
- (b) All results publically available in printed material and the web as well as through regular media events and statistical literacy seminars;
- (c) National and international users, investors, entrepreneurs and individuals with access to reliable, consistent and up-to-date annual labour statistics based on international standards which will strengthen the overall data credibility and facilitate international comparisons and analysis.

Measuring the programme's implementation progress will be accomplished using standard monitoring procedures. The project will be subject to evaluation in accordance with the policies and procedures established for this purpose

Annex 1: Work Plan and budget

Activities		Responsible Agency	Collaborating Agencies	2014		2015		2016		2017		2018		2019		2020		Total cost (RWF thousands)
No.	Description																	
Part II: Sub-Programme A – Production of labour statistics from Surveys and Censuses																		
<i>II.1</i>	<i>The annual labour force survey</i>	NISR	MIFOTRA, MINICON															
II.1.1	Preparatory activities																	
II.1.2	Implementation																	
Annual budget estimates (RWF thousands)						65,000	730,800	750,000	770,000	790,000	810,000			3,915,800				
<i>II.2</i>	<i>The 3-yearly EICV</i>	NISR	MIFOTRA, MINICON, PSF															
Annual budget estimates (RWF thousands)				1,477,300			3,649,900			3,709,900			8,837,100					
<i>II.3</i>	<i>The yearly Integrated Business Survey</i>	NISR	MINICON, MIFOTRA, PSF, RDB															
Annual budget estimates (RWF thousands)					230,000	241,500	253,600	266,300	279,600	293,600			1,564,600					
<i>II.4</i>	<i>The 3-yearly Establishment Census</i>	NISR	RSSB, MIFOTRA, RRA, RDB, PSF															
Annual budget estimates (RWF thousands)				534,200			550,900			567,600			1,652,700					

Activities		Responsible Agency	Collaborating Agencies	2014		2015		2016		2017		2018		2019		2020		Total cost (RWF thousands)
No.	Description																	
II.5	<i>The 5-yearly Sector surveys</i>	RDB	NISR, MIFOTRA, WDA, Relevant sector ministry, NCBS															
Annual budget estimates (RWF thousands)										100,000								100,000
II.6	<i>The 5-yearly Tracer Studies</i>	WDA	NISR, MINEDUC, RDB, NCBS															
Annual budget estimates (RWF thousands)				180,000										180,000				360,000
II.7	<i>The National Statistical System</i>	NISR	All major producers															
II.7.1	Establishment register maintained																	
Annual budget estimates (RWF thousands)						6,500		5,000				5,000		5,000				21,500
II.7.2	National classification of industry: Alphabetical classification index																	
Annual budget estimates (RWF thousands)				2000		2,500		60		20								4,580
II.7.3	National classification of occupation: Alphabetical classification index																	
Annual budget estimates (RWF thousands)				2000		3,000		60		20								5,080

Activities		Responsible Agency	Collaborating Agencies	2014		2015		2016		2017		2018		2019		2020		Total cost (RWF thousands)
No.	Description																	
II.7.4	Rwanda Dictionary of Labour Statistics																	
Annual budget estimates (RWF thousands)				1000	1,000													2,000
II.7.5	Rwanda Labour Statistics Council																	
Annual budget estimates (RWF thousands)					200													200
II.7.6	Labelling of official labour statistics																	
Annual budget estimates (RWF thousands)					2,000	2,000												4,000
Part III: Sub-Programme B – Production of labour statistics from Administrative Sources																		
III.1	Statistical tables based on RRA employee records	NISR	RRA, MIFOTRA / LMIS															
Annual budget estimates (RWF thousands)				60	300													360
III.2	Unique identification number for enterprises	NISR	RRA, RSSB, MIFOTRA, RDB															
Annual budget estimates (RWF thousands)				120	40													160
III.3	Labour inspector census module	MIFOTRA / LMIS	NISR, MINALOC															
Annual budget estimates (RWF thousands)					4,500													4,500
III.4	IPPS data	MIFOTRA																
Annual budget estimates (RWF thousands)				300	300													600

Activities		Responsible Agency	Collaborating Agencies	2014	2015	2016	2017	2018	2019	2020	Total cost (RWF thousands)
No.	Description										
III.5	Local level data for M&E of NEP projects	MIFOTR A, MINALOC	NISR								
Annual budget estimates (RWF thousands)				300	35,000						35,300
III.6	MIFOTRA & LMIS dissemination system improved	MIFOTR A / LMIS	None								
Annual budget estimates (RWF thousands)				3000	40,000						43,000
III.7	Increased data on skills availability from the education and training system	MINEDUC & WDA	NCBS								
Annual budget estimates (RWF thousands)					100	50	20	20	20	20	230
Total cost (RWF thousands)				2,200,280	385,940	979,470	5,304,460	1,041,320	1,254,620	5,381,120	16,536,920

Annex 2: Labour Market Indicators*

Category 1: Labour Supply (Labour Force)

Group	No.	Title	Priority
Population	1	Distribution of Working age population by Age, Sex and Labour force status	II
	2	Dependency ratio	II
	3	Age structure of population	III
Labour Force	4	Labour force participation rate	I
	5	Distribution of persons outside the labour force by Reason	III
	6	Labour force status by Nationality	IV
Employment	7	<i>Employment-to-population ratio</i>	I
	8	<i>Distribution of Employed population by Industry</i>	I
	9	Distribution of Employed population by Status in employment <ul style="list-style-type: none"> • <i>Vulnerable employment rate</i> • Proportion of employees in precarious work 	I
	10	Informal sector employment rate	I
	11	Informal employment rate	I
	12	Distribution of employed population by Occupation	II
	13	Distribution of employed population by Working time bands <ul style="list-style-type: none"> • Excessive hours 	II
	14	Average weekly hours worked	II
	15	Share of paid Employment in non-agricultural employment	III

Group	No.	Title	Priority
	16	Average weekly hours worked by Employed population by Status in employment	III
	17	Average weekly hours worked by Employed persons in selected 2-digit level Industries	III
	18	Average weekly hours worked by Employed persons in selected 2-digit level Occupations	III
	19	Distribution of employed population by Industry and Occupation	III
	20	Employees by Industry	IV
	21	Employees by Institutional sector	IV
	22	Employees by selected 2-digit level Industries	IV
	23	Employees by Occupation	IV
	24	Employees by selected 2-digit level Occupations	IV
	25	Employees by Industry and Occupation	IV
	26	Employees by weekly hours worked by Industry	IV
	27	Employees by weekly hours worked by selected 2-digit level Industries	IV
	28	Employment in the informal sector by main & secondary activity	IV
29	Distribution of employed persons by nationality	IV	
Labour Underutilization	30	Unemployment rate	I
	31	Youth unemployment rate	I
	32	Youth not in education and not in employment rate	I
	33	Time-related underemployment rate	I
	34	<i>Rate of Labour underutilization</i>	I
	35	Long-term unemployment rate	II

Group	No.	Title	Priority
	36	(Former) Relaxed unemployment rate	II
	37	Unemployed population by Category (1 st time, Previously employed)	IV
	38	Unemployed persons previously employed by former Industry	IV
	39	Unemployed persons previously employed by former Occupation	IV
	40	Registered job-seekers rate	IV
Wages	41	Average hourly earnings of employees by Industry, Occupation <ul style="list-style-type: none"> Average hourly earnings of employees in selected 2-digit or lower occupations 	I
	42	Average hourly earnings of employees by deciles	II
	43	Wage index	III
	44	Average income-from-employment for self-employed by Industry, Occupation	III
	45	Minimum wage rate	III
	46	Mean weekly earnings of employees by selected 2-digit level Industries	IV
	47	Mean weekly earnings of employees by selected 2-digit level Occupations	IV
Skills	48	Distribution of Labour force by Educational attainment	I
	49	Distribution of unemployed persons by Educational attainment	I
	50	Distribution of employed persons by Occupation and Educational attainment	I
	51	Distribution of Employed persons with certification by type of certification (Vocational certificate, Bachelor's degree, Masters degree, Ph. Ds, Professional qualification) by Industry	I
	52	Distribution of employed foreigners by Industry	I
	53	Distribution of trained persons by areas of training and level of training	I
	54	Literacy rates of the labour force	II

Group	No.	Title	Priority
	55	Distribution of required skills by type of establishment	III
	56	Distribution of number of outputs (trained persons) accessed professional internship from public & private institutions	III
	57	Distribution of Working age population by Educational attainment	III
Employment Equity & Industrial relations	58	Share of women in non-agricultural paid employment	II
	59	Share of youth in non-agricultural paid employment	II
	60	Female share of employment in senior and middle management	II
	61	Wage gap	II
	62	Occupational segregation	III
	63	Trade union density rate of employed persons for each Status in employment category by Industry	III
	64	% of Employed persons covered by collective bargaining for each Status in employment category	III
	65	% of Employed persons covered by collective bargaining by Industry	III
	66	Distribution of Number of strikes and lockouts by Industry	III
	67	Distribution of Number of workers involved in strikes and lockouts by Industry	III
	68	Distribution of Number of registered complaints by type and Industry	III
	69	Trade union membership by type of member	IV
	70	Trade union density rate of employed persons for each status in employment category by Institutional sector	IV
	71	Employed persons covered by collective bargaining by Institutional sector	IV
72	Days not worked due to strikes and lockouts by Industry	IV	
Safe Work & Social protection	73	Fatal occupational injury rate	II
	74	Labour inspection rate	II

Group	No.	Title	Priority
	75	Non-fatal occupational injury rate	II
	76	Rate of occupational diseases	II
	77	Ratio of labour inspectors to number of workplaces coverable	II
	78	Share of persons in labour force with pension coverage	II
	79	Distribution of Social security beneficiaries by Industry	III
	80	Number of self-employed persons contributing to social security	III
	81	Proportion of persons over 64 years entitled to a pension	III
	82	Cases of non-fatal occupational injury by Occupation	IV
	83	Cases of non-fatal occupational injury by Type of incapacity and Industry	IV
	84	Days lost due to cases of occupational injury with temporary incapacity for work by Industry	IV
	85	Cases of fatal occupational injury by Industry	IV
	86	Cases of fatal occupational injury by Occupation	IV
	87	Workers in reference group by Industry	IV
	88	Workers in reference group by Occupation	IV
89	Registered workplaces that could be selected for labour inspection	IV	
Poverty of employed persons	90	Working poverty rate	I
	91	Earnings inequality	II
	92	Low pay rate	III
	93	Working-age population living below the national poverty line by labour force status	IV

Category 2: Labour supply (Other work activities)

Group	No	Title	Priority
Other labour input into SNA	1	Distribution of persons in (own-use production of goods, unpaid trainee/apprentice work, volunteer work in market enterprises and volunteer work for own-use production of goods for other households) by Industry	I
	2	Rate of subsistence foodstuff producers	II
	3	Rates of own-use producers of goods by activity cluster	II
	4	Unpaid trainees/apprentices in establishments by Industry	III

Category 3: Labour demand

Group	No.	Title	Priority
Vacancies & Jobs	1	<i>Vacancy rate</i>	I
	2	<i>Distribution of Jobs created in Formal/informal sectors by Industry,</i>	I
	3	Registered Vacancies	IV
	4	Evolution of professional service providers last 5 years	IV
	5	Evolution of employment agencies last 5 years	IV
Costs to employer	6	Labour costs	II
Establishments	7	Distribution of Establishments by Formal/Informal sectors	I
	8	Growth rate of Micro, small & medium enterprises (MSMEs)	II
	9	Distribution of establishments by Ownership	II
	10	Distribution of establishments by Size (Capital or employment)	II
	11	Distribution of work permits by Industry and Nationality	IV

Category 4: Context

Group	No.	Title	Priority
Context	1	Labour productivity (Growth rate of the ratio GDP/E)	I
	2	Labour income share of Gross value added	I
	3	Employment elasticities (Growth of employment as ratio of growth of GDP)	I
	4	Inflation rate	I
	5	Children's economic activities / Child labour	II
	6	Proportion of working age population (labour force or employed) living with HIV/AIDS	II
	7	Public social security expenditure as proportion of GDP	II
	8	GDP growth rate	II
	9	Private investment as proportion of GDP	II
	10	Public expenditure on health as proportion of GDP	III
	11	Public expenditure on education as proportion of GDP	III

*: Core Rwanda Labour Market Indicators are in bold