

# DIRECTORY OF MAJOR SAMPLE SURVEYS IN INDIA

**Occasional Report-2012** 

Central Statistics Office,
Ministry of Statistics & Programme
Implementation
Government of India, New Delhi
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## **Content- Directory of Sample Survey**

Sl. No.	Items	Page Numbers
1	Foreword	6
2	Directorate of Economics & Statistics, D/O	8-16
	Agriculture and Cooperation, Ministry of Agriculture,	
	New Delhi	
	Improvement of Agricultural Statistics	
	(a)Estimation of area of principal agricultural	
	crops under Timely Reporting Scheme	
	(b)Estimation of area and production of	
	principal agricultural crops under	
	Establishment of an Agency for Reporting of	
	Agricultural Statistics	
	(c )Crop Estimation Survey on Fruits &	
	Vegetables	
	Improvement of Crop Statistics	
	The Comprehensive Scheme for Studying the	
	Cost of Cultivation of Principal Crops in India	
	Agriculture Census 2010-11 and Input Survey	
	2011-12 By Ministry of Agriculture	
3	National Sample Survey Organization (NSSO), Ministry	17-24
	of Statistics & P.I.	
	NSS 66th Round (July 2009-June 2010) Socio Economic Survey on Household Consumer Expenditure and Employment and Unemployment	
	NSS 67th Round (July 2010-June 2011) Non- Agricultural Unincorporated Enterprises belonging to three sectors viz. Manufacturing, Trade and Other Services	
	NSS 68th Round (July 2011-June 2012) Socio Economic Survey on Household Consumer	

	Expenditure and Employment and	
4	Unemployment  Labour Bureau, Ministry of Labour  Rural Labour Enquiry  Working Class Family Income & Expenditure Survey  Occupational Wage Surveys  Socio-economic conditions of Different Segments of Labour.  Annual Survey of Industries  Survey of Labour Conditions  Contract Labour Survey  Annual Survey of Industries	25-30
5	<ul> <li>Reserve Bank of India</li> <li>Industrial Outlook Survey</li> <li>Order Books Inventory and Capacity Utilisation Survey</li> <li>Credit Condition Survey</li> <li>Inflation Expectations Survey of Households</li> <li>Consumer Confidence Survey</li> <li>Survey of Professional Forecasters</li> <li>Basic Statistical return (BSR)-4: Composition and Ownership Pattern of Deposits with Scheduled Commercial Banks (SCBs)</li> <li>BSR-6: Debits to Deposit and Credit Accounts with Scheduled Commercial Banks</li> <li>Survey of Small Borrowal Accounts</li> </ul>	31-39
6	Miscellaneous Surveys conducted by Central Government Offices  • Sample Registration System(SRS)  • National Family Health Survey(NFHS)  • Annual Health Survey  • Socio Economic Surveys  • Annual Survey Of Industries  • Agriculture Surveys  Pilot/Ad-hoc Surveys	40-41
7	Agro-Economic Research Centre for North-East India.  Assam Agricultural University, Jorhat  • State Budgetary Resources and Agricultural Development  • Impact of Macro Management of Agriculture Scheme  • Potential and prospects of Rabi crops cultivation	43-54

	• Impact of NREGA on Wage Rates, Food Security	
	and Rural Urban Migration	
	• Impact of Emerging Marketing Channels in	
	Agriculture -Benefit to producer -Sellers and	
_	Margins of orange and potato	
8	Animal Husbandry & Veterinary Department, Assam	55-56
9	Sample Surveys conducted by Directorate of	57-59
	Economics & Statistics, Bihar	
	Survey on Household Consumer Expenditure &	
	Employment and Unemployment	
	Survey on "UN incorporated non-agricultural	
	Enterprises in Manufacturing, trade and	
	other service sector (excluding construction	
	Survey on "Household Consumer Expenditure &	
	Employment and unemployment	
	Survey on Annual Survey of Industries	
	9th Agricultural Census	
	National Sample Survey: (2009-10)	
10	Directorate of Health Services, Govt. of Goa, Health	60-61
	intelligence Bureau	
11	Surveys conducted by Directorate of Animal	62-65
	Husbandry- Gandhinagar, Gujarat	
12	Evaluation of Maternal and Child Health (MCH)	66-78
	Services in Gujarat by District Level Rapid Household	
	Survey, Health & Medical Services and Medical	
10	Education, Govt. of Gujarat	70.00
13	Office of the Director of Fisheries Vikas Bhavan,	79-80
1.4	Thiruvnathanpuram, Kerala	01.00
14	Office of the Labour Commissioner,	81-83
1.5	Thiruvananthapuram, Kerala	04.00
15	Govt. of Maharashtra, Forest Resources Survey	84-88
	Information regarding Sample Survey of tree	
	enumeration work for various forest divisions	
	conducted in Maharashtra during the year	
	2009-10,2010-11,2011-12	
16	Directorate of Veterinary & Animal Husbandry- Govt.	89
	of Nagaland	
17	Directorate of Economics & Statistics, Odisha	90-96
	• Establishment of an Agency for Reporting	
	Agricultural Statistics	
	Quick Sample Survey on Financial Inclusion	
	Agriculture Census	
18		97
19	Directorate of Animal Husbandry and Veterinary	98-99
	Govt. of Odisha, Planning & Coordination Department	

	Services, Odisha, Cuttack			
20	Directorate of Agriculture, Punjab	100		
21	Directorate of Economics & Statistics, DES, Tamil	101-107		
	Nadu			
	<ul> <li>Study / Survey on non-profit institutions</li> </ul>			
	• Study / Survey on annual survey of			
	industries			
22	Directorate of Economics & Statistics, Andaman and	108		
	Nicobar Administration			
23	Union Territory of Dadra and Nagar Haveli	109-110		
24	List of sources Agencies, which have sent NIL reply in	111		
	respect of Sample Surveys			

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### **FOREWORD**

As part of its mandate to coordinate statistical activities amongst Ministries/Departments of the Government of India and with the State agencies involved in statistical activities with a view to improving the quality of data; identifying gaps in data availability and suggestions remedial measures, including methodology and analysis of data, the Ministry of Statistics and Programme Implementations has been bringing out the publication "Directory of Sample Surveys in India" on an ad-hoc basis.

I am glad that the Coordination and Publication Division of the Ministry has now brought the "Directory" covering sample surveys conducted/initiated by Central and State agencies during the years 2009,2010 & 2011, as reported by them. Sample Surveys conducted by various Ministries/Departments of Government of India as also its organizations, have been reported in the publication. Coverage of sample surveys carried out by the State/UT Directorates of Economics and Statistics (DESs) has also been included in the report.

I am sure that various line departments of the State/UT Government are also conducting sample surveys in their respective fields of interest, and in the next issue, efforts would be made to cover them in the report. In today's' information age with the advent of internet and with most of the State DESs as also Ministries/Departments of Government of India having their own web sites, more demanding users could see the web sites of the concerned agencies or approach time for further details, when required.

I would like to add a word of caution here. It is possible that some organizations might have conducted a few more surveys/studies, in addition to those reported by them. However, the report carries information as received from them. This publication is only a 'Compilation" of what has been reported to the Ministry, and it does not necessarily endorse the methodology followed, sampling design adopted, sample size and whether it was representative, conclusion drawn etc. The MOSPI would, however, be ever willing to assist the Ministries/Department/Organizations as also State Government in designing their sample surveys or even in preparing survey instruments, if approached for the purpose in advance so as to accord credibility to the surveys conducted and conclusions drawn.

The Ministry would like to place on record its appreciation to all the concerned agencies for their cooperation in supplying the information needed for preparation of this publication.

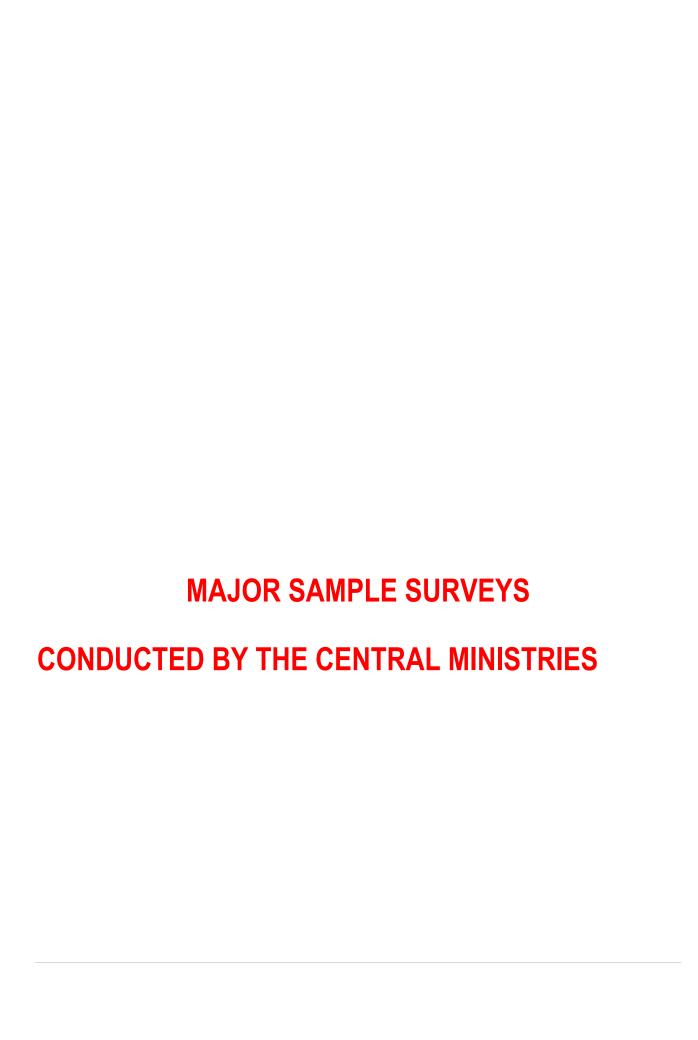
Efforts made by the Coordination and Publication Division (CAP) of the Ministry to bring out this publication in a short period and coordinating with a large number of organizations are praise worthy, and I congratulate all the officers and staff of the Division.

The directory is not an exhaustive one, however, Despite the various limitations, the information help enrich understanding of the major sample surveys in India. I hope that users would find the report informative and useful. We would also, of course, welcome suggestions for any improvement in the publication.

(Signed) Dr. T.C.A. Anant

Secretary to the Government of India & Chief Statistician of India

New Delhi, the 28th March, 2013



# Directorate of Economics & Statistics, D/O Agriculture and Cooperation, Ministry of Agriculture, New Delhi

Name of Survey: Improvement of Agricultural Statistics (Conducted both during 2010-11 and 2011-12)

**Objective:** The basic objective of the Scheme is to collect and improve agricultural statistics in the form of area/ production/yield rate for principal agricultural crops/7 fruit crops and 7 vegetable crops.

**Components of the Scheme**: The scheme has four components namely:

- a. Timely Reporting Scheme (TRS),
- b. Establishment of an Agency for Reporting of Agricultural Statistics (EARAS),
- c. Improvement of Crop Statistics (ICS); and
- d. Crop Estimation Survey on Fruits & Vegetables (CES-F&V).

### 1. Estimation of area of principal agricultural crops under Timely Reporting Scheme (TRS)

**Objective:** On the basis of complete enumeration in a sample of 20 percent of the villages on priority basis, the TRS envisages to provide in time:

- Estimates of the principal crop areas after the sowings are completed; and
- Information on irrigated area, un-irrigated area and also area under high yielding and local varieties of the various crops

**Geographical Coverage**: Covers 16 land record States namely, Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttrakhand, Jharkhand and Chhattisgarh and two Union Territories namely, Delhi and Puducherry

**Sampling Design/ Methodology used**: The design of the sample survey is stratified multistage random sampling with tehsil or a Revenue Inspector circle or even a Patwari circle as stratum, depending upon the conditions prevailing in the various states.

In States, where there is only one village per patwari circle, the villages in each stratum are divided at random into 5 equal sets in such a way that each comprises 20 per cent of the villages in the stratum.

In States where the Patwari circles contain more than one village each, first the villages within the patwari circles are arranged at random and then the circles within a stratum are arranged in a random order. Then a linear systematic sample of village with period 5 is chosen for ensuring coverage of all the villages in the course of 5 years under the TRS. It is envisaged that the 5 systematic samples, which would result on account of this procedure, are to be listed right in the beginning. The procedure of systematic selection applied to a random arrangement of the villages in each stratum, results in a stratified random sample.

In this way, 5 independent non-over lapping groups of 20 percent villages are formed, the main idea being that over a period of 5 years all the villages in State would be covered under the scheme. Out of 5 sets, a sample of one set is selected randomly with equal probability year after year.

**Coverage/Sample Size**: In the villages selected for TRS programme, the concerned Patwaris are to carry out crop inspection on cent per cent basis and prepare the Khasra register.

**Period of the survey**: Agriculture Year (July-June)

Name(s) of the Agency which conducted the survey : State Agricultural Statistics Authority (SASA)

Name of the Sponsoring Agency (if any): Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi

**Conclusion/Findings/ Final Results of the Survey**: Agricultural statistics, in the form of area under principal agricultural crops during the years was derived.

2. Estimation of area and production of principal agricultural crops under Establishment of an Agency for Reporting of Agricultural Statistics (EARAS) {Conducted both during 2010-11 and 2011-12}

**Objective**: On the basis of complete enumeration in a sample of 20 percent of the villages, to provide:

- (i) Estimates of the principal crop areas and production; and
- (ii) Information on irrigated area, un-irrigated area and also area under high yielding and local varieties of the various crops.

Besides area statistics, EARAS provides frame to select plots for conduct of crop cutting experiments to estimate yield rates.

**Geographical Coverage**: EARAS is implemented in three non-land record States namely, Kerala, Orissa and West Bengal and four North Eastern States namely, Arunachal Pradesh, Nagaland, Sikkim and Tripura. In the absence of any Government Department for the regular updation of land records in these States, collection of statistics of area, production and yield rate is done through EARAS in each of the implementing States.

**Sampling Design/ Methodology used**: The design of the sample survey is stratified multistage random sampling with tehsil as a stratum. Villages in each stratum are to be divided at random into 5 equal sets such that each comprises 20 per cent of the villages in the stratum. Five independent non-over lapping groups of 20 percent villages are formed, the idea being to cover all the villages in State under the scheme over a period of 5 years. Out of 5 sets, a sample of one set is selected randomly with equal probability year after year.

In West Bengal and Orissa, the crop- wise area enumeration work is done in all Mouzas/Villages selected under EARAS. In Kerala, for collection of area statistics, the State is divided into 811 Investigator Zones. A sample of 100 key plots is selected from each Investigator Zone. With respect to each key plot, a cluster consisting of 5 sub survey division numbers is formed and land utilisation statistics are collected from these 100 clusters of 5 sub survey division numbers.

Coverage/Sample Size: In the selected villages, primary worker carry out crop inspection on cent-percent basis.

**Period of the survey**: Agriculture Year (July-June)

Name(s) of the Agency which conducted the survey: State Agricultural Statistics Authority (SASA)

Name of the Sponsoring Agency (if any): Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi

**Conclusion/Findings/ Final Results of the Survey (in brief)**: Agricultural statistics in the form of area/production/yield rate for principal agricultural crops were derived.

**3. Crop Estimation Survey on Fruits & Vegetables (CES-F&V)** {Conductedboth during 2010-11 and 2011-12}

**Objective**: To obtain reliable estimates of area, yield and production of selected fruit and vegetable crops.

**Geographical Coverage**: Covers 11 States namely, Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh.

Sampling Design/ Methodology used: To estimate area and productivity of fruits, stratified multistage random sampling is used and stratification is done at talukas/sub-division level. A total of 150-200 villages are selected in a district. To estimate area under fruit crops, the number of villages in the district is selected by probability proportional to size with replacement, taking area under the fruit as the size measure. Villages are completely enumerated to obtain information on the area under fruit orchards and the number of trees, both in the orchards as well as stray trees. Five orchards in the selected villages and three clusters of four trees of bearing age in the orchards are then selected with Simple Random Sampling Without Replacement (SRSWOR) for estimation of yield. Data on yield is recorded throughout the harvesting season.

To estimate area and productivity of vegetables, sub-stratification of talukas is done on the basis of village-wise area under vegetables. 3 to 4 sub-stratum with equal area under vegetables is formed. Clusters of three villages are taken as primary sampling units. 20% clusters are selected with SRSWOR and are completely enumerated for estimating area under vegetables. The area enumeration is done in the beginning of each period consisting of three months. In 50% of the clusters selected for area enumeration, 6 to 8 fields of each important vegetable are selected and crop cutting experiments are conducted in a randomly selected plot of 5m x 5m in each field to estimate yield by observing all the pickings in each period.

**Coverage/Sample Size**: 150-200 villages are selected in a district. In the selected villages, primary worker carry out crop inspection on cent-percent basis. Seven fruits viz. Mango, Apple, Banana, Grapes, Guava, Pineapple and Citrus, Five vegetables viz. Cauliflower, Potato, Onion, Tomato and Cabbage, and two spices, viz. Ginger and Turmeric are covered.

**Period of the survey**: Agriculture Year (July-June)

Name(s) of the Agency which conducted the survey: The scheme is being implemented through State Directorates of Economics and Statistics in Andhra Pradesh, Orissa, Maharashtra, Karnataka and Tamilnadu.

In the States of Punjab, UP and Haryana, it is being implemented through Directorate of Horticulture. In the States of Gujarat, Rajasthan and HP, the responsibility has been given to Directorate of Agriculture, Board of Revenue and Directorate of Land Records respectively.

Name of the Sponsoring Agency (if any): Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi

**Conclusion/Findings/ Final Results of the Survey (in brief)**: Under the scheme, area of production and productivity of selected horticulture crops in 11 selected States are being generated.

**Improvement of Crop Statistics (ICS) {**Conducted both during 2010-11 and 2011-12**}** 

**Objective**: The objective is to bring improvements in crop statistics by conducting spot supervision of:

- a) area enumeration,
- b) area aggregation, and
- c) crop cutting experiments on a sample basis.

**Geographical Coverage**: The sample check covers 16 land record States namely, Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, UttraKhand, Jharkhand and Chhattisgarh and Union Territory of Puducherry.

**Sampling Design/ Methodology used**: The check on area enumeration consists of selecting and locating a sample of 20 survey/sub-survey numbers within each selected village with the help of Khasara register and village maps and then recording the actual utilisation by the supervisor.

The sample check on preparation of crop abstract consists of checking of page-wise totals of area figures under crops and area utilisation as recorded in the khasara register and recording the totals of crop areas and utilisation.

Inspection of crop cutting experiments at harvest stage covers specified major crops and consist of examining whether the State primary worker conducts the experiments conforming to the procedure laid down under the general crop estimation surveys of the State. The aspect of check includes the selection of survey numbers/sub-survey numbers; selection of fields and random coordinates; marking of plots, and; harvesting & weighting of produce.

Coverage/Sample Size: Supervision of area enumeration is carried out in 10,000 villages by both Centre and State. (5,000 villages by central agency-NSSO and 5,000 villages by State machinery).

Similarly, about 30,000 crop cutting experiments (CCEs) are covered for checking every year.

**Period of the survey:** Agriculture Year (July-June)

Name(s) of the Agency which conducted the survey: State Agricultural Statistics Authority (SASA)

Name of the Sponsoring Agency (if any): Directorate of Economics & Statistics, Ministry of Agriculture, New Delhi

**Conclusion/Findings/ Final Results of the Survey (in brief)**: The objective to locate lacuna, if any, in the State system of collection of agricultural statistics and to suggest measures to effect lasting improvements in the system through joint efforts of the Central and State authorities, were achieved.

**4.** The Comprehensive Scheme for Studying the Cost of Cultivation of Principal Crops in India {Conducted both during 2009-10 and 2010-11}

**Objective:** The main objective of the scheme is to generate crop-wise and state-wise costs of cultivation and production estimates to enable Commission for Agriculture Cost and Prices(CACP) to recommend the Minimum Support Prices to the Government. These estimates are also used by the Ministry of Agriculture for implementation of Market Intervention Scheme.

**Geographical Coverage**: The scheme is implemented in 19 States namely Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttaranchal and West Bengal.

**Sampling Design/ Methodology used**: The sampling design of the scheme is a three stage stratified random sampling design with tehsil as the first- stage unit, village/cluster of villages as the second-stage unit and operational holdings as the third and ultimate- stage unit. Each State is divided into homogenous agro-climatic zones, based on cropping pattern, soil types, rainfall, etc. The primary sampling units (tehsils) are allocated to different zones in proportion to the total area of all the crops covered by the study.

The primary sampling units are selected in each zone (stratum) with probability proportional to the area under the selected crops and with replacement. Within each tehsil, the village/ cluster is also selected following the same procedure. In each selected village/cluster, all the operational holdings are enumerated and classified according to size into 5 size classes, the class limits being fixed uniformly for all villages/clusters. The 5 size classes, at present, are operational holdings with area less than 1 hectare; between 1 and 2 hectares, between 2 and 4 hectares, between 4 and 6 hectares and above 6 hectares. In each size class, two holdings are selected by simple random sampling, without replacement. However, if in any village/ cluster, a particular size class does not contain even two holdings, more holdings are selected from adjacent size-classes to make up the deficit.

The detailed cost related data are collected on cost accounting method in respect of selected sample holdings. The scheme envisages collection of representative data on inputs and outputs in physical and monetary terms on a comparable and comprehensive basis following uniform methodology. Under the scheme, daily entries of debit/credit for the expenditure/ income are made in order to assess the total cost /benefit incurred/accrued to each farmer covered under the scheme. The field data are collected by the field men, each one of them filling around 60 schedules. Of these 60 schedules, 20 show details of operations like use of fertilizers, power and water etc. and are filled up on daily basis after making inquiries from 10 farm-holdings which may comprise more than 10 fields. The supervision of collection of the field-data is done by the Field Supervisors. Each Field Supervisor, on an average, supervises work of 7.5 field-men.

The items of cost of cultivation cover both the paid-out costs (out-of-pocket expenses) and the imputed costs. The items covered under these costs are:

### a) Paid-out Costs

- i) Hired labour (human, animal and machinery);
- ii) Maintenance expenses on owned animals and machinery;
- iii) Expenses on material inputs such as seed (home grown and purchased), fertilizer, manure (owned and purchased), pesticides and irrigation;
- iv) Depreciation on implements, farm buildings (such as cattle sheds, machine sheds, storage sheds) and land revenue:
- v) Rent paid for leased- in land; and
- vi)Miscellaneous expenses.

### b) Imputed Costs

- i) Value of family labour;
- ii) Managerial input of family;
- iii) Rent of owned land; and
- iv) Interest on owned fixed capital, for which the farmer does not incur any cash expenses.

**Coverage/Sample Size**: The scheme presently covers 28 crops i.e. paddy, wheat, jowar, bajra, maize, ragi, barley, moong, urad, arhar, gram, masur, peas, groundnut, rapeseed and mustard, nigerseed, soyabean, sunflower, safflower, sesamum, cotton, jute, sugarcane, VFC tobacco, onion, potato, black pepper and coconut. Study of VFC Tobacco has been discontinued w.e.f. 20012-13. These crops are selected for a block period of three years. The combination of crops covered in each State varies from State to State, depending upon their importance in terms of its relative contribution in the production of the relevant crop at All-India level.

**Period of the survey**: The survey is conducted annually

**Name(s) of the Agency which conducted the survey**: The Scheme is implemented through 16 Agricultural / General Universities / Colleges. Besides, the Directorate of Tobacco Development undertakes a special study on VFC tobacco in the state of Andhra Pradesh which has been discontinued w.e.f. 2012-13.

List of Implementing Agencies is as under:

- Assam Agricultural University, Jorhat, Assam
- Acharya N.G. Ranga Agricultural University, Hyderabad, A.P.
- Rajendra Agricultural University, Samastipur, Bihar
- Sardar Patel University, Gujarat
- CCS Haryana Agriculture University, Hissar
- Himachal Pradesh University, Shimla, H.P.
- University of Agri. Sciences, Bangalore, Karnataka
- University of Kerala, Thiruvananthapuram

- JLN Krishi Viswa Vidyalaya, Jabalpur, M.P.
- Mahatma Phule Krishi VidyaPeeth, Ahmednagar, Maharashtra
- Orissa University of Agri. & Tech., Bhubaneswar
- Punjab Agriculral University, Ludhiana
- MaharanaPratap U/0 Agri& Technology, Udaipur, Rajasthan
- Tamil Nadu Agriculure University, Coimbatore
- R.B.S. College, Agra, U.P.
- Bidhan Chandra Krishi Viswa Vidyalaya, West Bengal
- Directorate of Tobacco Development, Chennai, Tamil Nadu (discontinued w.e.f. 2012-13.
- Arecanut, Karnataka (by University of Agri. Sciences, Bangalore, Karnataka)

Name of the Sponsoring Agency (if any): Directorate of Economics and Statistics, Ministry of Agriculture, New Delhi.

**Conclusion/Findings/ Final Results of the Survey (in brief)**: On the basis of data so collected, the estimates of cost of cultivation and cost of production are generated as per the prescribed scientific methodology recommended by Experts.

### Agriculture Census 2010-11 and Input Survey 2011-12, Ministry of Agriculture

Introduction & Objectives: Agriculture Census in India is conducted at an interval of five years to collect and compile data on operational holdings in the country. The basic unit of information in the Agriculture Census is the operational holding as distinct from the ownership holding. Agriculture Census in the country is conducted in a Census – cum – Sample Survey method and data is collected three distinct phases. During Phase-I and Phase-II of the Census, data on number, area and agriculture characteristics of operational holdings are collected. The Phase-III of Agriculture Census, (Referred as Input Survey) is conducted as a follow up survey to the Agriculture Census (reference year as next year to that of the Agriculture Census) to collect data on input use pattern of operational holdings in the country. Eight Agriculture Censuses since 1970-71 have been completed in the country so far and current Agriculture Census 2010-11 is ninth in the series. Main objectives of the Agriculture Census are:

- To describe the structure and characteristics of agriculture providing statistical data on operational holdings, operated area, land utilization, live-stock, agricultural machinery and implements, use of fertilizers, pattern of input use etc.
- To provide bench-mark data needed for formulating new agricultural development programmes and evaluating their progress.
- To provide basic framework of operational holdings and its characteristics for carrying out future agriculture surveys.
- To lay basis for developing integrated programme for current agricultural statistics.

**Geographical Coverage of the Survey:** The Agriculture Census 2010-11 and Input Survey 2011-12 is implemented in all States /UTs of the country.

**Methodology Used/Coverage/Sample Size:** In India, the Agriculture Census data (Phase-I/Phase-II) is collected following two broad approaches; in States where comprehensive land records exist (Land Record States), data is collected and compiled through re-tabulation of information available in the Village Land Records. For other States (Non-Land record States), the data is collected on sample basis. **In Phase-I** of the Census,data on primary characteristics like number of operational holdings and area operated by different size class (marginal, small, semi-medium, medium and large), social groups (SC, ST, Others), gender (male/female), types of holding (individual, joint and institutional), etc. is collected. This operation covers all the villages in land record States and 20% of the villages in non-land record States.

During, **Phase-II**, holding schedule is canvassed in selected 20% villages in each tehsil for collecting detailed data on irrigation status, tenancy particulars, terms of leasing, cropping pattern and dispersal of holdings, etc. The estimates of agricultural characteristics of operational holdings are prepared in at Tehsil/District/State level. In **Phase III**, referred generally as **'Input Survey'**, relates to collection of data on pattern of input use (fertilizer, irrigation seed, pest management), agriculture credit, size of the household, age and educational level of the holders, multiple cropping, across various crops, States and size group of holders. This survey is conducted in 7% of villages selected in each tehsil.

The data of Input Survey is collected through field inquiries from the selected operational holders of sample villages. The estimate for Input characteristics is prepared at District / State level. For Input Survey, institutional holdings and holdings operated by persons not residing in the village, are excluded in the purview

of the survey (i.e., only individual and joint holdings operated by resident cultivators constitute universe (population) for this survey).

**Period of the Survey:** The reference year for Agriculture Census 2010-11 and Input Survey 2011-12 are Agricultural Year 2010-11 (i.e. July 2010 to June 2011) and Agricultural Year 2011-12 respectively. Fieldwork for Phase-I of the Census has been completed and data is expected to be finalised by October, 2012. The data collection activities for Phase-II and Phase-III (Input Survey) of the Census are progressing in various States.

Name(s) of the Agency which conducts the survey: Directorate of Economics & Statistics, Department of Revenue and Agriculture etc. of the States/UTs are responsible for conducting the field work.

Name of the Sponsoring Agency: Ministry of Agriculture, New Delhi.

Conclusion/Findings/Final Results of the Survey: On completion of field work, the data for Agriculture Census 2010-11 and Input Survey 2011-12 is entered, processed and validated for generation of results. After finalization of the data, the results will be published in the form of reports and hosted in the website at http://agcenus.nic.in for public use.

### **National Sample Survey Organization (NSSO):**

# NSS 66<sup>th</sup> Round (July 2009-June 2010) Socio Economic Survey on Household Consumer Expenditure and Employment and Unemployment

**Objectives**: To collect data on the subjects of Household Consumer Expenditure and Employment and Unemployment. The survey is conducted quinquennialy. This is the eighth quinquennial survey in the series and the last one was conducted in 61st round (July 2004 – June 2005).

**Geographical Coverage:** Whole of India Union except (i) interior villages of Nagaland situated beyond five kilometers of the bus route and villages of Andaman and Nicobar Islands which remain inaccessible throughout the year.

**Sampling Design/Methodology used:** A Stratified multi-stage design has been adopted for the survey.

Coverage/Sample Size: 12784 FSUs for Central Sample.

**Period of the survey:** Field work started from 1<sup>st</sup> July 2009 and ending on 30<sup>th</sup> June 2010. The survey period was divided into the four sub-rounds of three months each.

Name of the Agency which conducted the survey: Field work undertaken by Field Operations Division of National Sample Survey Office (NSSO) under Ministry of Statistics and Programme Implementation.

**Data Processing:** Data processing is done by the NSSO, Data Processing Division (Hq), Kolkata and its various Data Processing Centers located at Delhi, Ahmedabad, Bangalore, Nagpur and Giridih.

### **Major Findings:**

1. As per the report no. 537, the highlight of the Employment and Unemployment Survey are as under:

### A Household and Population

- About 70 per cent of the households in India belonged to the rural areas and accounted for about 73 per cent of the total population.
- The average household size in India was about 4.4. It was about 4.6 in rural India and about 4.1 in urban India. The sex ratio (females per 1000 of males) in India was 936. It was 947 in rural India and 909 in urban India.
- About 12 per cent of households in both the rural and urban areas were headed by females. Compared to all households, they had, on an average, a relatively smaller household size (about 3.2 in rural areas and about 3.1 in urban areas) and a much higher sex-ratio (about 1785 in rural areas and about 1808 in urban areas).
- Among those households having at least one member of age 15 years and above, about 5 per cent in the rural areas and 10 per cent in the urban areas had no usually employed member of age 15 years and above.
- ➤ The population in the age group 15-59 years comprised about 59 per cent of the rural males and 61 per cent rural females. In the urban areas, about 66 per cent each of the males and females belonged to this age group.
- In the rural areas, during 2009-10, about 71 per cent of males and 53 per cent of the females were literate. The corresponding proportions, in the urban areas, were 84 per cent and 74 per cent.

In 2009-10, about 35 per cent of the rural households had MGNREG job cards. During this period, about 24 per cent of the rural households got work in MGNREG works and 19 per cent of the rural households sought but did not get MGNREG works.

### **B Labour Force**

- According to the *usual status* (ps+ss), about 56 per cent of rural males and 27 per cent of rural females belonged to the labour force. In the urban areas, the corresponding proportions were 56 per cent of males and 15 per cent for females.
- During the period 2004-05 to 2009-10, the LFPRs according to *usual status* (ps+ss) remained almost the same for rural males but decreased by about 6 percentage points for rural females. During that period, LFPRs according to *usual status* (ps+ss) decreased by about 1 percentage point for the urban males and decreased by about 3 percentage points for the urban females.

### **C Work Force**

- About 39 per cent of the population in the country was usually employed. The proportion was 41 per cent in the rural and 35 per cent in the urban.
- ➤ The gender differential in the worker population ratio (WPR) was distinct. The WPR for rural males was 55 per cent while it was 26 per cent for rural females. In the urban areas, it was 54 per cent for males and 14 per cent for females.
- The daily status rates were slightly lower than the current weekly status rates, which, in turn, were slightly lower than the usual status rates. The current weekly status WPR was 53 per cent for rural male, 22 per cent for rural females, 54 per cent for urban males and 13 per cent for urban females. The currentdaily status rateswere 50 per cent, 18 per cent, 52 per cent and 12 per cent for rural males, rural females, urban males and urban females, respectively.
- Among the usually employed (ps+ss), about 54 per cent of the rural males and 56 per cent of rural females were self-employed. In the urban areas, corresponding proportions were 41 per cent for both males and females. In the urban areas, about 42 per cent of the usually employed males and 39 per cent of the usually employed females were regular salaried/wage employees.
- ➤ Between 2004-05 and 2009-10, in the rural areas, WPR in the *usual status* approach remained almost the same for the males and decreased by about 7 percentage points for the females. In the urban areas, the rates decreased by about 1 percentage point for the males and 3 percentage points for the females.
- In rural India, the proportion of usually employed (ps+ss) male workers engaged in the agricultural activities declined gradually from 81 per cent in 1977-78 to 63 per cent in 2009-10 whereas for the female workers, the decline was less from 88 per cent to 79 per cent during the same period.
- In urban India, the 'trade, hotel and restaurant' sector engaged about 27 per cent of the usually employed (ps+ss) male workers while each of 'manufacturing' and 'other services' sector accounted for nearly 22 per cent of them. On the other hand, among the usually employed urban females, 'other services' sector accounted for the highest proportion (39 per cent), followed by 'manufacturing' (28 per cent).
- The proportion of urban females employed in 'other services' sector increased from 36 per cent in 2004-05 to 39 percent in 2009-10 and the 'agriculture' sector revealed a fall in its share by about 4 percentage points during this period.

### **D** Unemployment Rate

- The unemployment rate (number of person unemployed per 1000 persons in the labour force), according to *usual status* (ps+ss), was 16 in the rural areas and 34 in the urban areas. It was 57 for urban females, 28 for urban males and 16 for both males and females in the rural areas.
- The unemployment rates according to the *current daily status* (cds) approach are higher than the rates obtained according to *usual status* approach and *weekly status* approach, thereby indicating a high degree of intermittent unemployment. The unemployment rate according to the *current weekly status* (cws) approach was 33 in rural areas and 42 in the urban areas. According to the *current daily status* (cds) approach, it was 68 in the rural areas and 58 in the urban areas.
- During the period 2004-05 and 2009-10, the *unemployment rate* in terms of the *usual status* (ps+ss), remained almost the same for rural males and decreased by 1 percentage point for urban males. For rural females also it remained almost the same whereas for urban females it decreased by 1 percentage point.
- In both the rural and urban areas, unemployment rate among the *educated* (secondary and above) persons of age 15 years and above was higher than that among those whose education level was lower than *secondary*: for *usual status* (ps+ss), unemployment rate among the *educated* was 4 per cent for each of rural and urban males while it was 12 per cent for each of rural and urban female.
- The unemployment rate was much higher among the youth (15-29) as compared to that in the overall population. According to the *usual status* (ps+ss), unemployment rate among the youth was 5 per cent each for male and female in rural areas, 8 per cent for urban male and 14 per cent for urban female.
- Among the educated youth (age:15-29 years and level of education: secondary and above), the unemployment rate was predominantly high in both the rural and urban areas. According to the usual status (ps+ss), the rates were 8 per cent for rural males, 18 per cent for rural females, 10 per cent for urban males and 23 per cent for urban females.

### **E** Underemployment

- During 2009-10, the proportion of usually employed (ps+ss) females who were found not to be employed during the week preceding the date of survey was 15 per cent in rural India and nearly 6 per cent in urban India. The corresponding percentages for usually employed males were 3 and 1 only.
- The proportion of person-days of the usually employed (ps+ss) utilised for work, in the rural and urban areas, was estimated at about 69 per cent and 85 per cent, respectively for females, and 92 and 96 per cent, respectively for males.
- During 2009-10, in the age group 15 years and above, about 11 per cent of usually employed rural males and 6 per cent of usually employed urban males sought or were available for additional work. The corresponding percentages for females were around 8 in rural areas and 6 in urban areas.
- During 2009-10, in the age group 15 years and above, about 10 per cent of rural males, 7 per cent of rural females and 5 per cent each of urban males and females reported availability for alternative work.

### **F Labour Mobility**

> During the two years preceding the date of survey, only a negligible proportion (less than 1 per cent) among the usually (ps) working persons had changed work status while change of establishment

- among the usually (ps) employed was reported for 5 per cent for rural male, 6 per cent for rural female, 4 per cent for urban male and 5 per cent for urban female.
- The proportion of persons who changed their establishment is much less among those with education level *highersecondary and above* as compared to those with lower levels of education be it in rural areas or in urban areas.
- During the two years preceding the date of survey, about 1 per cent of rural males, urban males, urban females, and negligible proportion (0.3 per cent) of rural females who were workers in *usual status* (ps) reported change in their industry of work.
- During the two years preceding the date of survey, about 1 per cent of rural males, urban males, urban females, and negligible proportion (.3 per cent) of rural females who were workers in *usual* status (ps) reported change in their occupation.
- **2.** As perthe report no. 538, the highlight of the Consumer Expenditure Survey is as under:

### A LEVEL OF CONSUMPTION

- ➤ Using the MMRP (Modified Mixed Reference Period) method of measurement of MPCE (Monthly Per Capita Consumer Expenditure), average MPCE in 2009-10 was estimated as Rs.1053.64 in rural India and Rs.1984.46 in urban India.
- The poorest 10% of India's rural population had an average MPCE of Rs.453. The poorest 10% of the urban population had an average MPCE of Rs.599.
- ➤ The top 10% of the rural population, ranked by MPCE, had an average MPCE of Rs.2517 about 5.6 times that of the bottom 10%. The top 10% of the urban population had an average MPCE of Rs.5863 about 9.8 times that of the bottom 10%.
- Among the major States, Kerala (Rs.1835) had the highest rural MPCE. It was followed by Punjab (Rs.1649) and Haryana (Rs.1510). In all other major States, average rural MPCE was between Rs.750 and Rs.1250.
- Average rural MPCE was lowest in Bihar and Chhattisgarh (around Rs.780), and also low in Orissa and Jharkhand (around Rs.820), as well as in Uttar Pradesh and Madhya Pradesh (around Rs.900).
- Maharashtra (Rs.2437) and Kerala (Rs.2413) were the two major States with the highest MPCE in the urban sector, followed by Haryana (Rs.2321). Urban MPCE was lowest in Bihar (Rs.1238).
- ➤ The median level of MPCE was Rs.895 in rural India the and Rs.1502 in urban India.
- In the 22-year period from 1987-88 to 2009-10, real MPCE measured by the Uniform Reference Period method was estimated to have grown by only 19% in rural India, but by as much as 42% in urban India. The growth in real urban MPCE over the 16-year period between 1993-94 and 2009-10 was about 34%.
- Measured by the Mixed Reference Period method, real MPCE grew by about 19% in rural India during the 16-year-period from 1993-94 to 2009-10, and by as much as 37½% in urban India over the same period.

### **B PATTERN OF CONSUMPTION**

- ➤ Using the MMRP (Modified Mixed Reference Period) method of MPCE measurement, food was estimated to account for about 57% of the value of the average *rural* Indian's household consumption during 2009-10. This included 14% for cereals and cereal substitutes, a little less than 8% for milk and milk products, and 8% on vegetables. Among non-food item categories, fuel for cooking and lighting accounted for about 8%, clothing and footwear for 6%, medical expenses for a little over 5%, conveyance and education for about 3½% each, other consumer services for 4%, and consumer durables for 3½%.
- For the average urban Indian, over 44% of the value of household consumption was accounted for by food, including 8% by cereals and 7% by milk and its products.
- The share of most of the food item groups in total consumption expenditure was higher in rural India than in urban India, fruits and processed food being exceptions. For non-food item groups, the share was usually higher in urban India. The most noticeable differences were in case of cereals (urban share: 8%, rural share: 13.8%), rent (urban: 6%, rural share: 0.5%) and education (urban: 8%, rural: 3.6%).
- In the major States, the share of food in rural MPCE varied from 46% for Kerala and 48% for Punjab to 64% in Assam and 65% in Bihar. In the urban sector it varied from 40-41% in Kerala and Maharashtra to 52% in Jharkhand and 53% in Bihar and Assam.
- The share of cereals in total expenditure in rural India varied across the major States from 7% in Punjab and Haryana to 21% in Assam and Bihar. In urban India, the share varied from 6% for Haryana, Punjab and Kerala to 13% in Assam and 15% in Bihar.
- ➤ The budget share of cereals was 23-24% for the bottom decile class of rural India but fell with rise in MPCE to about 7-8% for the top decile class. In urban India the share of cereals fell from 18-19% for the bottom decile class to 3-4% for the top decile class.
- The budget share of milk and milk products in rural household consumer expenditure was seen to rise with MPCE level from 3-4% in the bottom decile class to 9% in the ninth decile class. For urban India, however, the share was higher for the middle third of the population than for the highest decile classes.
- The share of fuel and light in household consumer expenditure was around 10-11% for the bottom decile class in both sectors. With rise in MPCE it was seen to fall to about 6% in the top decile class for rural India and 5% for urban India.

### C QUANTITY OF CEREAL CONSUMPTION

- Average cereal consumption per person per month was 11.3 kg in rural India and 9.4 kg in urban India.
- In rural India, average monthly per capita cereal consumption was around 10.2 kg for the poorest 10% of the population. With rise in MPCE it was seen to increase, quickly at first, to reach 11 kg in the third decile class, and then more slowly. It was above 12 kg for the top two decile classes. In urban India, per capita cereal consumption was seen to increase from under 9.5 kg to about 9.7 kg per month over the first five decile classes but then to fall, finally plunging to 8.6 kg for the top decile class of population.

➤ Over the 16-year period from 1993-94 to 2009-10, estimated monthly per capita cereal consumption (which does not include cereal content of purchased processed food) fell from 13.4 kg to 11.35 kg in rural India and from 10.6 kg to 9.39 kg in urban India. The fall was spread over all major States.

### D INEQUALITY IN CONSUMPTION LEVELS

- ➤ Using the MMRP (Modified Mixed Reference Period) method of MPCE measurement, the Lorenz ratio for the distribution of MPCE was estimated as 0.270 for rural India and 0.362 for urban India.
- ➤ Comparison of Lorenz ratios from the present survey with those obtained from the survey of 2004-05, using the Uniform Reference Period method of measurement of MPCE, showed a slight reduction from 0.297 to 0.291 in the rural sector and a slight increase from 0.373 to 0.381 in the urban sector of the country.
- 3. NSS 67<sup>th</sup> Round (July 2010-June 2011) Non-Agricultural Unincorporated Enterprises belonging to three sectors viz. Manufacturing, Trade and Other Services

**Objectives**: To collect data on Non-Agricultural Unincorporated Enterprises belonging to three sectors viz. Manufacturing, Trade and Other Services.

**Geographical Coverage:** Whole of India Union except (i) interior villages of Nagaland situated beyond five kilometers of the bus route and villages of Andaman and Nicobar Islands which remain inaccessible throughout the year.

**Sampling Design/Methodology used:** A Stratified multi-stage design has been adopted for the survey.

Coverage/Sample Size: 16000 FSUs for Central Sample.

**Period of the survey:** Field work started from 1<sup>st</sup> July 2010 and ended on 30<sup>th</sup> June 2011. The survey period was divided into the four sub-rounds of three months each.

Name of the Agency which conducted the survey: Field work undertaken by Field Operations Division of National Sample Survey Office (NSSO) under Ministry of Statistics and Programme Implementation.

**Data Processing**: Data processing is done by the NSSO, Data Processing Division (Hq), Kolkata and its various Data Processing Centers located at Delhi, Ahmedabad, Bangalore, Nagpur and Giridih.

**Major Findings:** As per the Press release of Survey on Unincorporated Non-agricultural Enterprises (excluding construction), the salient findings of the survey are as under:

- ➤ Out of the estimated 5.77 crore unincorporated non-agricultural enterprises (excluding construction), about 54 per cent enterprises were located in rural areas and 46 per cent were located in urban areas.
- At all India level, 30%, 36% and 34% enterprises were engaged in manufacturing, trading and other services sector respectively. In rural India, these enterprises were more or less equally distributed (between 33 to 34 percent) among broad activity categories. In urban India, enterprises engaged in trading sector had the dominant share (38%) followed by other services sector (35.5%) and manufacturing sector (26.5%).

- At all India level, the OAEs (85%) had the dominant share of enterprises and also OAEs outnumbered establishments in all the three broad activity category namely Manufacturing (84%), Trade (86%) and Other Services (84%). The same pattern of dominance is observed in rural and urban areas also.
- ➤ Out of 4.9 crore OAEs, 58% and 42% were in rural and urban areas respectively. However, establishments in urban areas outnumbered establishments in rural area. Out of 89 lakh establishments, urban areas have a share of 70% against 30% in rural areas.
- About 10.8 crore workers were engaged in unincorporated non-agricultural enterprise (excluding construction). While about 51 percent of workers were located in urban areas, 49 per cent were located in rural areas. At all India level, the sector 'other services' had the highest percentage (36%) of workers. 'trade' and 'manufacturing' sectors had almost equal share (32%) of workers.
- At all India level, the OAEs had dominant share (65%) of workers and also the workers engaged in OAEs outnumbered those engaged in establishments in all the three broad activity category namely manufacturing (60%), trade (72%) and other services (63%). Though the dominance of workers in OAEs is observed in rural areas also, urban areas recorded slightly higher share of workers in establishments in the categories of manufacturing (53%) and other services (51%).
- At all-India level, aggregate annual gross value added (GVA) was estimated as Rs.628,356crores. The establishments contributed 55% to aggregate GVA. The overall GVA contribution of urban enterprises (68%) was much higher than rural enterprises (32%). Enterprises engaged in trade (39%) had contributed maximum to overall GVA followed by other services (36%) and manufacturing (25%). Share of OAEs in aggregate GVA was much higher in rural areas (63%) than that for urban areas (37%).
- At all-India level, annual gross value added per enterprise (GVAPE) was estimated as Rs. 1,08,951. For rural India, annual GVAPE for OAEs and Establishments were estimated as Rs. 44,101 and Rs. 2,77,829 respectively. The corresponding estimates for urban areas were Rs. 76,813 and Rs. 4,38,003 respectively. Highest GVAPE was for enterprises engaged in trading (Rs.1,17,454) followed by other services (Rs.1,16,633) and manufacturing (Rs.89,900).
- At all-India level, the annual gross value added per worker (GVAPW) was estimated as Rs. 58,193. For rural areas, annual GVAPW was estimated as Rs. 37,241 and the corresponding estimate for urban areas was Rs. 78,527. Highest GVAPW was for enterprise engaged in trading estimated as Rs.71,412 followed by other services (Rs.59,010) and 'Manufacturing' (Rs.44,347).
- The annual emoluments per hired worker (EPHW) for rural, urban and all India were estimated as Rs. 36,362, Rs. 51,603 and Rs. 47,020 respectively. EPHW was highest for enterprises engaged in other services, which was estimated as Rs. 40,861, Rs. 57,054 and Rs. 52,281 in rural, urban and rural & urban combined areas respectively.
- 4. NSS 68<sup>th</sup> Round (July 2011-June 2012) Socio Economic Survey on Household Consumer Expenditure and Employment and Unemployment

**Objectives**: To collect data on the subjects of Household Consumer Expenditure and Employment and Unemployment. The last survey on the subject was conducted during its 66<sup>th</sup> round which was eighth quinquennial survey in the series. The current survey is similar to a Quinquennial survey as far as subjects of enquiry, design, questionnaires and sample sizes are concerned.

**Geographical Coverage:** Whole of India Union except (i) interior villages of Nagaland situated beyond five kilometers of the bus route and villages of Andaman and Nicobar Islands which remain inaccessible throughout the year.

Sampling Design/Methodology used: A Stratified multi-stage design has been adopted for the survey.

**Coverage/Sample Size:** 12784 FSUs for Central Sample.

**Period of the survey:** Field work started from 1<sup>st</sup> July 2011 and ended on 30<sup>th</sup> June 2012. The survey period was divided into the four sub-rounds of three months each.

Name of the Agency which conducted the survey: Field work undertaken by Field Operations Division of National Sample Survey Office (NSSO) under Ministry of Statistics and Programme Implementation.

**Data Processing:** Data processing is done by the NSSO, Data Processing Division (Hq), Kolkata and its various Data Processing Centers located at Delhi, Ahmedabad, Bangalore, Nagpur and Giridih.

**Major Findings:** Results are yet to be released.

### Labour Bureau, Ministry of Labour

### **Table of Important Surveys:**

S.No.	Name of the Survey	Year of Start	Objective	Data Collected	Achievements
1.	Rural Labour Enquiry (RLE)	labour enquiries were conducted in 1950-51 and 1956- 57. Subsequent RLEs were conducted during 1974-75; 1977-78; 1983; 1987-88; 1993-94, 1999- 2000, 2004-05 and 2009-10.	The main objectives of Rural Labour Enquiries are: pllection of basic data required for revision/ construction of new series of CPI Nos. for Agricultural and Rural Labourers. erivation of reliable estimates on important socioeconomic characteristics of rural labour in general and agricultural labour in particular. nalysis of the trends in the socioeconomic conditions of rural labour households. Collection, compilation and publication of Wage rates in respect of 18 agricultural and non-agricultural occupations.		Release of CPI-AL/RL every month. Ionthly publication of wage rate statistics relating to 18 agricultural and non-agricultural occupations. eports pertaining to:(i) Consumption Expenditure of Rural Households (ii) Indebtedness among Rural Labour Households iii) General Characteristics of Rural Households iv) Wages and Earnings of Rural Labour Households and v) Employment and Un- employment of Rural Labour Households are released regularly.
2.	Working Class Family Income & Expenditure Survey	First survey in 1958-59 for base 1960=100, Second in 1970-	To revise the base of the Consumer Price Index Numbers for	'	Industrial workers are

	71 for base	Industrial Workers	engaged in	Release of Annual
	1971=100, Third	and compilation of	= =	Reports of Consumer
	in 1981-82 for	index numbers	plantations,	Price Index Numbers.
	base 1982=100,	with the new year	railways, motor	Release of Centre
	Fourth in 1999-	as base and to	transport	
	2000 for revising		•	•
		'	undertaking,	, ,
	the baseof the	income and	electricity	survey which, inter-
	series 1982=100	expenditure data	generating the	alia,include information
	to new series of	and release centre	distributing	on economic
	2001=100.	specific reports.	establishments	background of the
			and ports and	centre, family
			docks;	characteristics like
			monthly/weekly	literacy rate, marital
			prices.	status, activity status,
				economic status,
				family composition,
				earning strength,
				family income end
				expenditure, food
				consumption,
				budgetary position,
				indebtednesshousing
				etc.
				An All-India General
				Report was released
				by the Hon'ble Union
				Minister of State for
				Labour& Employment,
				Sh. Oscar Fernandes
				at Bangalore on
				26.6.08
				40 centre specific
				Reports have so far
				been released.
				Remaining 38 centre
				specific Reports are
				under print
3. Occupational	The First round of	1. To obtain	Occupation wise	Under the 6th round,
Wage Surveys	OWS was	basic data	data is collected	Report in respect of
(OWS)	conducted in	required	on employment,	Four Service Sector
(0110)	COTIQUOLEG III	required	on employment,	I DUI DEIVICE DECIDI

		1958-59. The 2nd round of OWS was conducted in 1963-65, the 3rd in 1974-79, the 4th in 1985-92 and the 5th in 1993-99. The 6th round of OWS was taken up in year 2002 and will cover 56 Industries.	for building Wage Rate Indices for major Manufactu ring, Mining and Plantation Industries:  2. To obtain data on wage componen ts of workers in different occupation in the selected industries to facilitate scientific studies of wage differential  3. To study the implement ation of Equal	wage rate, overtime and earnings in Manufacturing, Mining, Plantation, and service sector industries	industries has been released. The report on 3 Plantation & Tea Processing industries has been released. Four Mining Industries, Textile Garments Industry, Five Textile Industries, Ten Engineering Industries and Nine Engineering Industries has also been released.
4.	Socio-economic conditions of Different Segments of Labour:	2001 ( The scheme came into existence after merging four plan schemes	o conduct large scale surveys on all India basis with enlarged scope and coverage to	Data is collected on working and living conditions such as employment,	Socio-economic surveys on Women labour, 9 surveys of Scheduled Caste Workers and 7 of

viz.,(i) Unorganised Sector Survey (1971), (ii) Survey of Scheduled Castes/Schedule d Tribes Labour in Urban Areas (1973),(iii) Evaluation Studies on Implementation of Minimum Wages Act, 1948 (1981) and (iv) Socio-Economic Survey of Women Workers(1975)

collect data at all India level on working and living conditions of unorganised labour in industries/employ ments. socioeconomic characteristics scheduled castes/scheduled tribe and women workers with view to assess the implementation of provisions prescribed under relevant Labour Enactments so as to suggest formulation of suitable ameliorative measures for improving the working and living conditions of target groupsand evaluate the extent to which provisions of Minimum Wages Act have been implemented scheduled in employments. o study industrywise trend following liberalisation globalisation like

impact on wages,

wages and health earnings, and safety, labour welfare, social security, industrial relations. family characteristics. family assets. indebtedness, housing conditions. untouchability, environment and surrounding and awareness of welfare programme etc. Under the EMW studies data is collected on level and extent of compliance with the provisions of Minimum Wages Act. 1948 various scheduled employments, factors responsible inadequate for compliance etc.

Scheduled tribes workers 30 and of surveys Unorganised sector labour have since 25 been conducted. studies have been conducted so far to evaluate the implementation of the Minimum Wages Act in Agriculture, Mines, Building and Construction and Bidi Making Establishments. the Reports of all surveys/studies.

I			omployee and lavel		
			employment level,		
			upgraded skill		
			requirements and		
			skills made		
	_		redundant.		
5.	Annual Survey of	Sample Sector	o build up database	Data on	ASI Report 2007-08
	Industries	was started in	on employment,	employment,	Vol.I&Vol.II has been
	(Sample Sector)	1976-77	absenteeism,	absenteeism,	released.
			labour turnover,	labour turnover,	
			earnings and	earnings and	
			labour cost in	labour cost by	
			manufacturing	components in	
			sector.	manufacturing	
			o analyse various	sector.	
			components of		
			labour cost such		
			as wages/salaries,		
			bonus, provident		
			funds and staff		
			welfare expenses.		
6.	Survey of Labour	1959	To evaluate the	Information on	62 surveys (including
	Conditions		progress made in	employment,	two repeat surveys) in
			the working	wages and	60 industries have
			conditions of the	earnings, working	been conducted so far
			organised labour	conditions, welfare	
			in various	amenities, social	have been released.
			industries vis-a-vis	*	nave been released.
				relations etc.	
			under different	Tolations ots.	
			labour acts.		
7.	Contract Labour	1955		Information on	45 surveys in 40
'	Survey	1000	nature and extent	employment,	industries/
	Juitoj		of problems of	•	establishments have
			contract labour in	earnings, working	since been
			different industries	conditions, welfare	conductedand reports
			and to assess the	amenities, social	released for 44
				*	
			implementation of	, ,	` `
			provisions	by the contractors	circulation)
			prescribed for the	and details of jobs	
			welfare of contract	performed by	
			labour under	contract workers.	
			various enactment.		

8.	Annual Survey of	Census Sector	o build up database	Data on	ASI Report 2007-08
	Industries	was started in	on employment,	employment,	Vol.I&Vol.II has been
	(Census Sector)	1960-61	absenteeism,	absenteeism,	released.
			labour turnover,	labour turnover,	
			earnings and	earnings and	
			labour cost in	labour cost by	
			manufacturing	components in	
			sector.	manufacturing	
			o analyse various	sector.	
			components of		
			labour cost such		
			as wages/salaries,		
			bonus, provident		
			funds and staff		
			welfare expenses.		

### Reserve Bank of India

### **Industrial Outlook Survey**

Year of	Year of	Name of executing	Name of	Subject and nature of survey
initiation	completion (if	office/ Organisation	survey	
	completed)			
1998	Continued and	Division of Enterprise	Industrial	Quarterly survey conducted to get
	conducted	Survey, Department of	Outlook	insight into the perception of the public
	every quarter	Statistics and Information	Survey	and private limited companies
		Management,		engaged in manufacturing activities
		Reserve Bank of India,		about their own performance and
		Mumbai		prospects.

### Contact details of the office along with e-mail:

Division of Enterprise Surveys, C8-II Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: saugustine@rbi.org.in, dnandi@rbi.org.in

### **Detailed Information**

- Introduction: The Reserve Bank of India has been conducting Industrial Outlook Survey since 1998.
   The survey gives insight into the perception of the public and private limited companies engaged in manufacturing activities about their own performance and prospects. It provides useful forward-looking inputs for policymakers, analysts and business alike.
- Coverage and Sampling Design: The survey is canvassed among 2,000 public and private limited companies, mostly with paid-up capital above Rs. 5 million in the manufacturing sector. The panel of respondents is kept uniform to the extent possible with periodic updating in the case of addition of new companies or exclusion of closed/merged companies. The sample is chosen so as to get a good representation of size and industry.
- Field work: Out sourced.
- Data processing : In-house
- Findings: The assessment of business sentiments for the current quarter and expectations for the ensuing quarter are based on qualitative responses on 20 major parameters covering overall business situation, financial situation, demand indicators, price, profit margins and employment situation are arrived at. The survey findings are published in RBI website along with Macroeconomic and Monetary Developments on the eve of quarterly monetary policy and in RBI Bulletin in the consecutive month for public dissemination.

### 1. Order Books Inventory and Capacity Utilisation Survey

Year of	Year of	Name of executing	Name of	Subject and nature of survey
initiation	completion (if	office/ Organisation	survey	
	completed)			
2007	Continued and	Division of Enterprise	Order	Quarterly survey conducted to get the
	conducted	Survey, Department of	Books	actual movements in order books,
	every quarter	Statistics and Information	Inventory	inventories and capacity utilisation
		Management,	and	which are important indicators of
		Reserve Bank of India,	Capacity	economic activity, inflationary
		Mumbai	Utilisation	pressures and overall business cycle
			Survey	and as such, are useful for assessing
				the consumption and investment
				demand of manufacturing sector.

Contact details of the office along with e-mail:

Division of Enterprise Surveys, C8-II Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: <a href="mailto:saugustine@rbi.org.in">saugustine@rbi.org.in</a>, <a href="mailto:dnandi@rbi.org.in">dnandi@rbi.org.in</a>

### **Detailed Information**

- Introduction: The Reserve Bank of India has been conducting Order books, Inventories and Capacity
  Ultilisation Survey since 2007. The survey captures the actual movements in order books, inventories
  and capacity utilisation which are important indicators of economic activity, inflationary pressures and
  overall business cycle and as such, are useful for assessing the consumption and investment demand
  of manufacturing sector.
- Coverage and Sampling Design: The survey is canvassed among 2,500 public and private limited
  companies in the manufacturing sector with a good size/industry representation. The common set of
  companies varies to some extent across the survey rounds depending upon the response pattern in
  each survey round.
- Field work: Out sourced.Data processing: In-house
- Major Findings: The survey captures quantitative data on new orders received during the reference quarter, backlog orders at the beginning of the quarter, pending orders at the end of the quarter, total inventories with breakup of work-in-progress and finished goods inventories at the end of the quarter and item-wise production in terms of quantity and values during the quarter vis-à-vis the installed capacity from a targeted group of manufacturing companies. The trend analysis is done to capture the movements in inventories, order books and capacity utilization which are important indicators of economic activity, inflationary pressures and overall business cycle and as such, are useful for assessing the consumption and investment demand in each quarter. The survey findings are published in RBI website along with Macroeconomic and Monetary Developments on the eve of quarterly monetary policy and in RBI Bulletin in the consecutive month for public dissemination.

### 2. Credit Condition Survey

Year of	Year of	Name of executing	Name of	Subject and nature of survey
initiation	completion (if	office/ Organisation	survey	
	completed)			
2010	Continued and	Division of Enterprise	Credit	Quarterly survey conducted to get
	conducted	Survey, Department of	Condition	insights into the perceptions of major
	every quarter	Statistics and Information	Survey	schedule commercial banks about
		Management,		changes in sectoral credit demand and
		Reserve Bank of India,		credit standards applied by them for
		Mumbai		the quarter under study.

Contact details of the office along with e-mail:

Division of Enterprise Surveys, C8-II Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: saugustine@rbi.org.in, dnandi@rbi.org.in

### **Detailed Information**

- Introduction: The Reserve Bank of India has been conducting Credit Condition Survey since 2010. The survey seeks the perception of the leading scheduled commercial banks on credit demand, credit standards and terms and conditions on which loan is provided. The major sectors included in the survey are Agricultural, Industry and Personal loan sector.
- Coverage and Sampling Design: The survey covers major schedule commercial banks (SCBs) who are selected based on their contribution in total outstanding credit of all SCBs. Currently, the survey covers a panel of 30 SCBs having a share of around 90 per cent in the total outstanding credit.

• Field work: In-House

• Data processing: In- House

Major Findings: The assessment for the current quarter and expectations for the next quarter, based
on the responses given by the banks are arrived at. The findings are deliberated internally for
monetary policy purpose.

### 3. Inflation Expectations Survey of Households

Year of initiation	Year of completion (if completed)	Name of executing office/ Organisation	Name of survey	Subject and nature of survey
September 2005	Continued and conducted every quarter	Division of Household Survey, Department of Statistics and Information Management, Reserve Bank of India,	Inflation Expectations Survey of Households	Quarterly sample survey on perceived current inflation as well as three-month and one-year ahead inflation expectations.

### Contact details of the office along with e-mail:

Division of Household Surveys, C8-VI Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: helpieshdsim@rbi.org.in

### **Detailed Information**

- Introduction: Reserve Bank of India has been conducting Inflation Expectations Survey of
  Households (IESH) on a quarterly basis, since September 2005. The survey elicits qualitative and
  quantitative responses for three-month ahead and one-year ahead period expected price changes and
  inflation. Inflation expectations of households are subjective assessments and are based on their
  individual consumption baskets. The basic objective of this survey is to get household's perception on
  current inflation as well as expectations for three-month ahead and one-year ahead period.
- Coverage: The major metropolitan cities, viz., Delhi, Kolkata, Mumbai and Chennai are represented by 500 households each, while another eight important cities, viz., Jaipur, Lucknow, Bhopal, Ahmedabad, Patna, Guwahati, Bengaluru and Hyderabad are represented by 250 households each. Total sample consist of 4000 individuals.
- Sampling Design: A two-stage sampling scheme has been adopted for the survey. The geographical locations (i.e. city) form the first stage; the households form the second stage units. The households in a city are selected from different parts of the city with the intention to cover the entire city geographically and the respondents are also selected from different categories such as financial sector employees, other salaried employees, self-employed persons, housewives, retired persons, daily workers and others.

Field work: Out sourced.Data processing: In-house

Major Findings: The survey captures qualitative and quantitative responses for three-month ahead
and one-year ahead period expected price changes and inflation. These inflation expectations provide
useful inputs on directional information on near-term inflationary pressures and also supplement other
economic indicators to get a better indication of future inflation. The survey findings are published in
RBI website along with Macroeconomic and Monetary Developments on the eve of quarterly monetary
policy and in RBI Bulletin in the consecutive month for public dissemination.

### 4. Consumer Confidence Survey

Year	of	Year of	Name	of	executing	Name	of	Subject an	d nature o	of survey	
initiatio	n	completion (if	office/	Orgar	nisation	survey					
		completed)									
June 20	10	Continued	Departn	nent	of Statistics	Consumer		Quarterly	sample	survey	on
		and	and		Information	Confidence	,	consumer (	Confidence	on econo	omic

conducted	Management,	Delhi	Survey	and financial situations.
every quarter	Regional Office,			
	Reserve Bank of In	dia		

Contact details of the office along with e-mail:

Delhi Regional Office (DRO), DSIM, 6 SansadMarg, New Delhi-1.

E-mail: dsimnewdelhi@rbi.org.in

### **Detailed Information**

- Introduction: The Reserve Bank has been conducting the Quarterly Consumer Confidence Survey for obtaining the qualitative information since June 2010. Consumer confidence refers to the degree of optimism on the state of the economy that consumers are expressing through their activities of savings and spending. The changes in consumer confidence on economic and personal financial situation, savings and investment intention affect real economic activities and thus consumer confidence is a leading indicator of economic trends. The objective of this survey is to capture the households' confidence in current and expected economic conditions.
- **Coverage:** The survey covers six metropolitan cities, viz., Bangalore, Chennai, Hyderabad, Kolkata, Mumbai and New Delhi. For each round of survey 5,400 respondents are selected (900 respondents from each city). The sample is well spread across different occupational category and income groups.
- Sampling Design: A multi-stage sampling scheme has been adopted for the survey. The geographical locations (i.e. city) form the first stage. Each city is divided into three major areas and each major area is further divided into three sub-areas. From each sub-area, about 100 respondents are selected randomly.
- Field work: Out sourced.Data processing: In-house
- Major Findings: This survey gives an assessment of the consumer sentiments of the respondents based on their perceptions of the general economic conditions and their own financial situation. The assessments are analysed in two parts, viz., current situation as compared with a year ago and expectations for a year ahead. The survey findings are published in RBI website along with Macroeconomic and Monetary Developments on the eve of quarterly monetary policy and in RBI Bulletin in the consecutive month for public dissemination.

### 5. Survey of Professional Forecasters

Year of	Year of	Name of executing	Name of	Subject and nature of survey		
initiation	completion (if	office/ Organisation	survey			
	completed)					
September	Continued and	Statistical Analysis	Survey of	Quarterly survey conducted by		
2007	conducted	Division, Department of	Professional	collecting data on experts' forecast		
	every quarter	Statistics and	Forecasters	of key macroeconomic indicators		
		Information				
		Management,				

	Reserve Bank of India,	
	Mumbai	

### Contact details of the office along with e-mail:

Director, Statistical Analysis Division, C8-VI Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: spf@rbi.org.in

### **Detailed Information**

- Introduction of the survey with objective: Economic forecasting is a pre-requisite for a forward-looking macroeconomic policy. Forecasts of key macroeconomic indicators, such as output growth, inflation and interest rates are important not only for the Central Bank, but also for the Government, private businesses and individual households. For example, the availability of reliable and accurate macroeconomic forecasts is essential for: a) policymakers conducting monetary and fiscal policy; b) firms making investment decisions; c) individuals making consumption and savings decisions; and d) labour and management negotiating wage agreements. In this context, recent evidence suggests that while there are various methods of forecasting, survey forecasts outperform other forecasting methods. Traditional discussions of the theory of forecasting assume that professional forecasters attempt to minimize their forecast errors by using their training, expertise, and experience. In this respect, 'Survey of Professional Forecasters' is conducted by several central banks on major macroeconomic indicators of short to medium term economic developments as they can signal future risks to price stability and growth, and provide information on how economic agents gauge their risks. Besides, the 'Survey of Professional Forecasters' is just one of the time series used in empirical research on the formation of macroeconomic expectations.
- Coverage and Sampling Design: The survey of professional forecasters does not have a scientific survey design. Forecasters of those organizations are selected, which have an established research set-up and brings out periodic updates on economic developments. These organizations include investment banks, commercial banks, stock exchanges, international brokerage houses, select educational institutions, credit rating agencies, securities firms, asset management companies, etc.
- Field work: Field work/Data processing/Major findings: Survey schedules are sent to the select professional forecasters every quarter through email. The schedule covers annual as well as quarterly forecasts of major macroeconomic variables (viz. Real GDP, PFCE, GDS, GFCF, M3, Bank Credit, Combined GFD, Central Govt. FD, Corporate profit, Repo, Reverse Repo, CRR, RBI Reference Rates, T-Bill 91 days, 10 yr. Govt. Securities, Overall BoP, Export, Import, Trade Balance, Invisible Balance, WPI, CPI-IW, etc). The probabilities attached to possible outcomes of GDP and WPI were also asked. Long term forecasts (over next five years and ten years) for GDP, WPI and CPI-IW inflation. The forecasters are also required to provide the probabilities attached to possible outcomes of GDP and inflation. The filled-in schedules are received back through email. Overall results are presented in terms of mean, median, maximum and minimum forecasts for each of the variables. However, in order to avoid extreme forecasts values, median forecasts are preferred. The variability of the forecasts is also presented in the form of box-whiskers plots. The results of the survey are placed on the RBI website for public dissemination.

# 6. Basic Statistical return (BSR)-4 : Composition and Ownership Pattern of Deposits with Scheduled Commercial Banks (SCBs)

Year of	Year	of	Name of executing	Name of	Subject and nature of survey
initiation	completion	(if	office/ Organisation	survey	
	completed)				
About 38	Continued ar	nd	Bank Branch Statistics	Basic Statistical	Annual sample survey on
years old	conducted		Division, Department of	return (BSR)-4 :	composition and ownership
	annually		Statistics and	Composition	pattern of deposits with SCBs
			Information	and Ownership	
			Management,	Pattern of	
			Reserve Bank of India,	Deposits with	
			Mumbai	Scheduled	
				Commercial	
				Banks (SCBs)	

#### Contact details of the office along with e-mail:

Director, *Bank Branch Statistics Division*, C9-VI Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051

E-mail: bsr4@rbi.org.in

#### **Detailed Information**

- Introduction of the survey with objective: The Basic Statistical Return (BSR)-4 Survey of Ownership of Deposits of Scheduled Commercial Banks as on March 31, is an annual return, under the BSR system obtained from a sample of branches, selected scientifically for the year under reference. The BSR-4 intends to capture composition and ownership pattern of deposits, with the objective of building up estimates on the composition and ownership pattern of deposits at different levels of aggregation.
- Coverage and Sampling Design: All scheduled commercial Banks (SCBs) for March 2010 survey. Stratified sampling design with list of branches of all SCBs as a sampling frame.
- Field work: Nil
- Data processing: In-house
- Major findings:Details of bank deposits across various institutional categories such as government sector, private corporate sector, financial sector, household sector and foreign sector etc, in types of deposits accounts (viz., current, savings and term deposits), were arrived at. The findings of the survey are published on the RBI Bulletin for public dissemination.

#### 7. BSR-6: Debits to Deposit and Credit Accounts with Scheduled Commercial Banks

Year of	Year of	Name of executing	Name of	Subject and nature of survey
initiation	completion (if	office/ Organisation	survey	
	completed)			
About 38	Continued and	Bank Branch Statistics	BSR-6: Debits	Quinquennial sample survey on
years old	conducted	Division, Department of	to Deposit and	debits to deposit and credit
	Quinquennial	Statistics and	Credit Accounts	accounts with SCBs
		Information	with Scheduled	
		Management,	Commercial	
		Reserve Bank of India,	Banks	
		Mumbai		

#### Contact details of the office along with e-mail:

Director, *Bank Branch Statistics Division*, C9-VI Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051**E-mail:** bsr4@rbi.org.in

#### **Detailed Information**

- Introduction of the survey with objective: The Basic Statistical Return (BSR)-6 Survey of Debits to
  Deposit and Credit Accounts with Scheduled Commercial Banks, is quinquennial survey, under the
  BSR system obtained from a sample of branches, selected scientifically for the year under reference.
  The BSR-6 survey intends to capture the value of debits to deposit accounts, with a view to work out
  the rate of turnover of deposits, which is one of the important measures of economic activity in the
  country as a whole.
- Coverage and Sampling Design: All scheduled commercial Banks (SCBs). Stratified sampling design with list of branches of all SCBs as a sampling frame.

Field work: Nil

• Data processing: In-house

 Major findings:Details of outstanding balances in Current and Savings Deposit accounts and approved limits in Cash Credit and Overdraft accounts and total debits (quarter-wise) and cash debits (including those made through ATMs)(quarter-wise) in the above types of accounts, are being arrived at. The findings of the survey are published on the RBI Bulletin for public dissemination.

#### 8. Survey of Small Borrowal Accounts

Year of	Year	of	Name of executing	Name of	Subject and nature of survey
initiation	completion	(if	office/ Organisation	survey	
	completed)				
Since	Continued	and	Banking Statistics	Survey of Small	Sample survey on credit,
1979	conducted		Division, Department of	Borrowal	launched periodically. Last
	annually		Statistics and	Accounts	survey was conducted in 2008
			Information		
			Management,		
			Reserve Bank of India,		
			Mumbai		

## Contact details of the office along with e-mail:

Director, *Banking Statistics Division*, C9-VI Floor, Department of Statistics and Information Management, Reserve Bank of India, BandraKurla Complex, Bandra(E), Mumbai. 400051**E-mail:** <a href="mailto:sba@rbi.org.in">sba@rbi.org.in</a>

#### **Detailed Information**

- Introduction of the survey with objective: The Survey of Small Borrowal Accounts obtained from a sample of branches, selected scientifically for the year under reference. The survey is done to get the estimates of the Small Borrowal Accounts in the different dimensions. The details of sample selection methodology and estimation methodology are published in the article.
- Coverage: All Scheduled commercial Banks (SCBs) for 2010 survey.
- **Sampling Design:** Systematic sampling proportion to population sampling method has been used to select the sample form the list of branches.
- Field work: Nil
- Data processing: Outsourced
- Major findings: Details of survey results are published in the Monthly issue of RBI Bulletin.

# Miscellaneous Surveys conducted by Central Government Offices

Sample Registration System: Registration of births and deaths is an important source for demographic data for socio-economic development and population control in developing countries. The data on population growth, fertility and mortality serves as the starting point for population projections. Apart from these vital indicators, an adequate evaluation of a number of programs in the health sector, including family planning, maternal and reproductive health, immunization programs, is dependent upon the availability of accurate, upto-date fertility and mortality data. In India, the need for dependable demographic data was felt soon after independence heralding the era of five year planning. The registration of births and deaths started on voluntary basis and there was no uniformity in statistical returns resulting in both under-registration and incomplete coverage. In order to unify the civil registration activities, the Registration of Births & Deaths Act, 1969 was enacted. Despite having the registration of birth & death compulsory under the statute, the level of registration of births and deaths under the Act has continued to be far from satisfactory in several states/UTs. With a view to generate reliable and continuous data on these indicators, the Office of the Registrar General, India, initiated the scheme of sample registration of births and deaths in India popularly known as Sample Registration System (SRS) in 1964- 65 on a pilot basis and on full scale from 1969- 70. The SRS since then has been providing data on regular basis.

**National Family Health Survey (NFHS):** The National Family Health Survey (NFHS) is a large-scale, multi-round survey conducted in a representative sample of households throughout India. The survey provides state and national information for India on fertility, infant and child mortality, the practice of family planning, maternal and child health, reproductive health, nutrition, anaemia, utilization and quality of health and family planning services. Each successive round of the NFHS has had two specific goals: a) to provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues. The Ministry of Health and Family Welfare (MOHFW), Government of India, designated the International Institute for Population Sciences (IIPS) Mumbai, as the nodal agency, responsible for providing coordination and technical guidance for the survey. IIPS collaborated with a number of Field Organizations (FO) for survey implementation. Each FO was responsible for conducting survey activities in one or more states covered by the NFHS.

**Annual Health Survey (AHS):** AHS yields a comprehensive, representative and reliable dataset on core vital indicators including composite ones like IMR, MMR and TFR along with their co-variants (process and outcome indicators) at the district level and maps changes therein on an annual basis.

These benchmarks would help in better and holistic understanding and timely monitoring of various determinants on well-being and health of population particularly Reproductive and Child Health. It is conducted by O/o Registrar General, India, Ministry of Home Affairs, Government of India.

**Socio- Economic Surveys:** The Socio-Economic (SE) Surveys is mainly conducted by National Sample Survey Organization (NSSO)and are in the form of Rounds, each round being normally of one-year duration. The subject coverage of SE inquiries for different rounds is decided on the basis of a 10 year time frame. In this cycle, 1 year is devoted to land and live stock holdings, debt and Investment; 1 year to social consumption ( education and health care, etc. ), 2 years to quinquennial surveys on household consumer expenditure, employment & un-employment situation and 4 years to non- agricultural enterprises, namely, manufacturing, trade and services in un-organized sector. The remaining 2 years are for open rounds in which subjects of current/special interest on the demand of Central Ministries, State Governments and research organizations are covered. Well qualified and trained Investigators of NSSO and the State Governments collect information through enquiry method, using the same methodology & schedules that are specially designed for the survey.

Annual Survey of Industries: The Annual Survey of Industries (ASI) is an important survey of the Central Statistical Organization (CSO), MOS&PI and NSSO(FOD) conducts its field work. It is a statutory survey conducted under the provisions of the Collection of Statistics Act, 1953. The Deputy Director General, NSSO (FOD), New Delhi has been appointed as the Statistics Authority (SA) for the purpose. The SA is empowered by the act/legislation to collect and authorize officials to collect information from any industrial and commercial concern. The ASI provides data on various vital aspects of the registered manufacturing sector for use in the estimation of national income, studies of industrial structure and policy formulation. It generates data on input, output, employment, wage bill, capital formation etc., on an annual basis.

**Agriculture Surveys:** The Field Operations Division of NSSO has the overall responsibility of providing technical guidance to the States in developing suitable survey techniques for obtaining timely and reliable estimates of crop yield, bringing out uniformity in definitions and concepts and providing assistance in training the State field personnel. It also undertakes supervision over the primary field work of the State Governments in respect of area enumeration, area aggregation and Crop Cutting Experiments.

The supervision on field work for qualitative improvement in Agricultural Statistics is carried out through wellorganized sample survey under Improvement of Crop Statistics (ICS) Scheme. The Scheme aims at locating, through joint efforts of Central and State agencies, the deficiencies in the State system of Crop Statistics and suggesting remedial measures for effecting lasting improvements.

The responsibilities of supervisory staff of the NSSO (FOD) and State Governments inter-alia involve sample check in non-overlapping samples on (i) area enumeration and aggregation in about 10,000 sample villages in each season (ii) about 30,000 Crop Cutting Experiments in a year carried out by State primary workers. The findings of the sample supervision are brought out in the form of State-wise reports for two major seasons and an All India Status Report titled Review of Crop Statistics System in India through Scheme for Improvement of Crop Statistics.

Work related to planning of survey, compilation & analysis of data and publication of the reports is done at Agricultural Statistics (AS) Wing of NSSO (FOD) located at Faridabad, Haryana, India.

**Pilot/Ad-hoc Surveys:** Besides the regular socio-economic surveys of NSSO, taken up through 10-year survey cycle, NSSO from time to time, also undertakes pilot enquiries and ad-hoc or special surveys. Such surveys are conducted either for methodological studies or on the basis of specific requests received for such surveys, from other agencies.



# Agro-Economic Research Centre for North-East India, Assam Agricultural University, Jorhat

## Study No.1: State Budgetary Resources and Agricultural Development- A study in Assam.

- Year /month of initiation: April, 2007.
- Year/month of completion: July, 2009.
- Name of the Executing Office/Organization: Agro-Economic Research Centre for North-East India. Assam Agricultural University. Jorhat-785013.
- Name of the Survey: State Budgetary Resources and Agricultural Development-A study in Assam.
- Subject & Nature of the Survey-: Field Survey, data collection, tabulation, compilation, and report writing.
- Contact details of the office along with e-mail id:
   Director,Agro-Economic Research Centre for North-East India.

   Assam Agricultural University Campus, Jorhat-785013.

Introduction of the Survey with objectives: The Budget of a country or a State simply means an annual statement of accounts in terms of receipts and expenditure under different heads of developments. In each annual Budget, Government either at Central level or at State level gives receipts and expenditure statements through different policies initiatives adopted. It has been observed that the budgetary allocation against each development sector has been increasing in high rate to attain the required growth rate of the economy of the country. Declaration and stagnation in agricultural productivity growth almost all the crops across the States in the last few years is a matter of great concern of the country and the State as well. Due to down ward trend of crop production and productivity, the country in general and the State in particular is not able to maintain demand and supply side in balance for which the price of agricultural commodities is rising in the recent years.

As a result, it hurts common people and decreases their purchasing power. The State Assam is still not self-sufficient in food front. To meet the demand, the State has to bank on imported agricultural commodities from other States of the country. As a result a large amount of money drains out from the State's exchequer.

**Objectives:** The study will focus on the following specified objectives:

- To analyse the trend in allocation of resources to the agricultural sector as a whole and subsectors of agriculture in particular in the State.
- To document and analyse schemes under operation in the State contributing to the development of the agriculture sector.
- To enlist and analyse the impact of Central sector schemes operating in agricultural sector of the State.

**Coverage**: The study is based on the following 10 nos. sectors of Agriculture and allied sectors of Assam:

- Crop Husbandry
- Soil and Water conservation
- Animal Husbandry
- Dairy Development
- Animal Husbandry
- Forestry & Wild life
- Food, Storage & Warehousing
- Agriculture Research & Education
- Co-operation
- Agricultural Finance Institution.

**Sampling Design**: The study is based on the secondary level data collected from the state budget documents for financial resources allocated against 10 numbers of sectors of agriculture and allied sectors as mentioned above.

**Field Work:** The field work is done in different sectors as in the methodology of the study above.

**Data Processing:** The data is processed by different heads viz. agriculture, land utilization, expenditure, revenue, Plan, Scheme, GSDP, NSDP, etc. of Assam by simple mathematical & statistical tools and implements.

Major Findings: The state agriculture has already crossed more than 5 decades of economic planning but still it fails to lift agriculture sector of Assam from deficit level of food grains. The stagnation in productivity of major crops in the last few years is great cause of concerned. There are lots of controversies among economist and agriculture scientists regarding the cause of failure of agricultural planning in the State. One of the causes is that there is a wide gap between allocation and actual expenditure under different heads of development for which most of the development programmes suffer from inadequacy of budgetary expenditure in the State of Assam. Inadequate plan allocation is also one of the reasons for failure of State agriculture. It seems that ongoing technological changes have reached in its limitation to raise the productivity from existing level of productivity crops in the last few years. Addition of new area to net crop area of the State is not an easy task as it has its own limitation. The farmers of Assam are not able to adopt new technology fully for poor economic condition and lack of knowledge of the farmers. In absence of one technological input or partly used of technology is the major cause in stagnation of agricultural productivity in the State. Some important input like HYV seed is not available in the right time for which the State agriculture suffers a lot. Higher productivity can be expected only when all the inputs are applied in at right proportion and at right time which is not happening in Assam. As agriculture is now a day's capital intensive venture, therefore adequate credit supply to the farmers is utmost important this is still in sufficient and inadequate in the state. From the study, it has been established that the role of revenue expenditure on the growth in terms of NSDP of crop husbandry, animal husbandry & dairy, fishery and forestry were found very slow. Therefore, it needs a proper review to find out the reasons for not attaining the targeted goal of achievement.

Study No 2: Impact of Macro Management of Agriculture Scheme- A study in Assam

- Year/month of initiation: April,2007
- Year/month of completion: July 2010
- Name of the Executing Office/ Organization: Agro-Economic Research Centre for North-East India. Assam Agricultural University. Jorhat-785013.
- Name of the Survey: Impact of Macro Management of Agriculture scheme-A Study in Assam.
- Subject & Nature of the Survey: Field Survey, data collection, tabulation, compilation, and report writing.
- Contact details of the office along with e-mail id: Director, Agro-Economic Research Centre for North-East India. Assam Agricultural University Campus, Jorhat-785013

Introduction of the Survey with objectives: Agriculture is the largest unorganized sector, which provides employment and income to the majority of working population in the rural sector. Land resources of Assam are quite a rich. Rainfall and climate are congenial for growing a variety of crops including food crops, cash crops and a host of other horticultural crops. The State has allotted about 71.0 per cent of cultivable land under rice and more than 90 per cent of total land under food grains. Yet, the State is deficit in food front since early 60's due to low productivity of food crops mainly because of low adoption of technology for crop cultivation, shortage of infrastructural and institutional support and for high growth of population. Moreover, poor performance of agricultural sector can be attributed to small holdings, low cropping intensity, low level of adoption of new farm technology, inadequate irrigation facility and consequently low productivity of principal crops below the national average.

Under the Macro Management, the Central Government has been supplementing and complementing the State Governments' efforts through regionally differentiated 'Work Plans' comprising of crop/area/target group and specific interventions, formulated in an inert-active mode implementing a spirit of partnership with States. As a step towards this with effect from 2000-01, 27 Centrally Sponsored Schemes were merged with the umbrella 'Macro Management' leaving the full flexibility to the States to develop and pursue activities because of their regional priorities. With launching of the Technology Mission on Horticulture for the North-Eastern States, 10 other schemes pertaining to horticulture sector were kept out side of this Macro Management Mode of Agriculture Schemes for this region. In North-Eastern States of India and Assam in particular, about 17 important schemes have been merged under Macro Management. The pattern of assistance under the scheme is in the ratio of 90:10 for the Centre and the States respectively except in the case of North-eastern States where 100 per cent Central assistance was envisaged. The Central assistance consists of Grant and loan in the ratio of 80:20. Subsidy is available under the scheme on various components including agriculture implements. Training programmes on different crop cultivation were also introduced in the State. Considering the importance of agriculture in the economy of the State, top most priority was put in all the Five Years Plan by the Government on the supportive services for the development of agriculture sector. Achieving selfsufficiency in production of food grains has been the primary objectives of the Government. The efforts have been directed to make optimum and efficient use of available resources to maximize the sector's contribution to the NSDP. Therefore, much emphasis has been laid on enhancing the production and productivity of the crops including the horticultural crops by harnessing the best in frontier technologies through improved farm mechanization and assured irrigation, use of quality certified seeds of HYV, popularizing the Integrated Nutrient and Pest Management with the special use of bio-fertilizer and bio-pesticides.

**Objectives of the Study:** To assess the impact of the sub-schemes under the Macro Management of Agriculture Scheme on the production and productivity of various crops with minimum cost, the following objectives were framed:

- To assess the impact of the sub-schemes under the Macro Management of Agriculture Scheme on the production and productivity of various crops with minimum cost,
- To analyse the impact of efforts made by the State in increasing the seed replacement rates, in terms of ensuring timely availability of sufficient quantity of good quality seeds and
- To analyse the impact of the activities to promote Balance Integrated Nutrient Management to maintain soil fertility and environment.

**Coverage:** The Study Covers two crops- Paddy and Jute in Nagaon District in Assam including three blocks in each crop.

**Sampling Design:** In order to draw sample a complete district wise investment lists under MMMA schemes for the year 2007-08 was collected from the Directorate of Agriculture, Assam. After receiving the lists, Nagaon district of Assam was selected as the district had the highest investment under MMMA. A complete beneficiaries list of ICDP rice and Special Jute Development Programme was collected from the District Agriculture Office and Sub-Divisional Agricultural Office of the Nagaon district. In consultation with the State Agricultural Department and District Agricultural Office, Nagaon the Community Development Blocks (C.D. Blocks) and sample villages were selected by adopting the following criteria:

- Out of 18 (eighteen) C.D. Blocks of the district, 3 (three) C.D. Blocks were selected considering the highest demonstrations and trainings of different agricultural schemes under MMMA.
- From the 3 (three) selected C.D. Blocks, 12 (twelve) villages (4 (four) villages from each C.D. Blocks) were selected depending on the highest beneficiaries (rice and jute) in the villages.

After selecting the C.D. Blocks as well as the sample villages for the present investigation samples of beneficiaries were drawn following two stage random sampling technique. In the first strata, the beneficiaries were stratified according to type of the agricultural schemes. In the second strata, the beneficiaries were selected by random sampling method from each agricultural scheme covering 60 (sixty) samples 5 (five) beneficiary farmers from each village) as representative samples in each agricultural scheme. Thus, a total of 120 (one hundred twenty) beneficiary farmer households were selected for the study. The field level data were collected through personal interview method with the help of a set of specially designed schedules by the Coordinating Centre. Information on the socio-economic position of the beneficiaries, nature of agricultural activities as well as uses of seeds of different crops, uses of Integrated Nutrient and Pest Management and constraints were obtained from the individual beneficiaries of the different agricultural schemes.

**Field Work:** Field Work has done by a special schedule covering the objectives of the study by oral investigation through above methodology.

**Data Processing:** The data is processed by different Heads viz, Demographic pattern, education, land utilization, area, production, yield of the crop, income and expenditure etc by simple mathematical and statistical formula.

**Major Findings:** The present study on the impact of ICDP rice and SJDP (jute) under MMMA scheme on field level data indicated that in spite of efforts under the programmes the impacts were not found very encouraging as the economic condition of the sample farmers were not improved as expected. It was observed that the schemes were based on "Work Plan" of the Government, but the study revealed that more emphasis was often put on the targets and achievements without considering the weak points of the schemes and the problems of the farmers. These schemes often did not serve the real purpose of the needy farmers. The plan and policies of the Governments were very good. So, far making the agricultural development programmes successful in the state, development of infrastructural supports are necessary and it also requires efficient planning, monitoring and sincere execution of the policies by the Government agencies to make the schemes viable.

#### Study No.3: Potential and prospects of Rabi crops cultivation in Assam

- Year /month of initiation: Sept.2009.
- Year/month of completion: Sept.2011.
- Name of the Executing Office/Organization: Agro-Economic Research Centre for North-East India. Assam Agricultural University. Jorhat-785013
- 4. Name of the Survey: Potential and prospects of Rabi crops cultivation in Assam.
- 5. Subject & Nature of the Survey: Field Survey, data collection, tabulation, compilation, and report writing.
- 6. Contact details of the office: Director, Agro-Economic Research Centre for North-East India. Assam Agricultural University Campus. Jorhat-785013

Introduction of the Survey with objectives: The summary of the importance of agriculture in overall development of our economy can best be put in the jargons used in the National Agricultural Policy 2000 of Government of India- "Agriculture is a way of life, a tradition, which, for centuries, has shaped the thought, the outlook, the culture and the economic life of the people of India, Agriculture, therefore, is and will continue to be central to all strategies for planned socio- economic development of the country. Rapid growth of agriculture is essential not only to achieve self-reliance at national level but also for household food security and to bring about equity in distribution of income and wealth resulting in rapid reduction in levels". The majority of the rural population earn their livelihood from and therefore the sector not only provides the much needed food and fiber but employment to the rural mass, capital for economic transformation and thereby responsible to increase the total rural welfare in numerous way.

#### **Objectives:** The specific objectives of the present study are:

- To analyse the area, production and productivity of rabicrops in the district of Nagaonvis-a-vis
  Assam
- To study the economics of production of rabi crops in the sample farmers
- To study the factors affecting productivity of rabicrops
- To find out the constraints of production of *rabi* crops and suggest policy measures.

**Coverage:** The study covers the crops- Rape & Mustard, Pulses & Summer rice etc. in Nogaon district of Assam.

**Sampling Design:** The present study was undertaken in Nagaon district of Assam. The district was purposively selected as most of the *rabi* crops are grown extensively in the district- Among the *rabi* crops; summer rice, pulses arid oilseeds were covered by the study Although *rabi* vegetables are also grown by the farmers of the district for commercial purposes, it was not covered under the study due to the fact that summer rice, pulse and oilseeds are the major food crops of Assam. From the district, two community development blocks *i.e.*Kathiatoli and Batadrawa were selected for the study in consultation with the District Agriculture Officer. Fromeach block, three villages were selected for field investigation where *rabi* crops were exclusively grown by the farmers. Accordingly, from Kathiatoli block Chang Chaki Uttar Chang Chaki and ChariaHagi villages and from Batadrawa block Solouguri. AthgaonChapori and Kandhulimari villages were selected for data collection. Then from each selected village, 20 farmers of various farm size groups are selected by following random sampling method. Thus a total of 120 farmer households were covered by the study. The study is based on both primary and secondary level data. The relevant summary data were collected with the help of a set of specially designed schedules and questionnaire. The data were collected from the sample households through personal interview method.

**Field Work:** Field Work has done by a special schedule covering the objectives of the study by oral investigation through above methodology.

**Data Processing:** The data are processing different Heads viz, Demographic pattern, education, land utilization, area, production, yield of the crop, income and expenditure etc by simple mathematical and statistical formula.

**Major Findings:** The study highlighted that *rabi* crops have enormous potential in the study area despite a number of constraints being faced by the farmers. The officials in the State Agriculture Department and the scientists of agricultural university are to work in tandem to ensure that the fruits of technology reach the farmers at the grass roots. In order to achieve the desired level of productivity of *rabi* crops in the state, the Government must operate in a big and effective way in creating basic infrastructural facilities and in coordinating with related departments. A selective 'area approach' has been considered more effective to consolidate the situation and to boost up the production of *rabi* crops. In chronically flood affected areas, special programmes should be taken up for oilseed, pulses and summer rice cultivation in *rabi* seasons. In view of the situation, it is necessary for the State Government to make concerted effort to bring all tile potential areas under *rabi* cultivation to attain self- sufficiency in food grain production. However, all efforts to increase agricultural production will have no impact unless the farmers are effectively involved in the development programmes. For successful implementation of the agricultural development programmes, it is desirable to involve the farmers in the decision making process as well as in implementation of the programmes.

# Study No.4: Impact of NREGA on Wage Rates, Food Security and Rural Urban Migration -A study in Assam

Year/month of initiation: Sept.2009Year/month of completion: 2011.

• Name of the Executing Office/Organization: Agro-Economic Research Centre for North-East India. Assam Agricultural University. Jorhat-785013

- Name of the Survey: Impact of NREGA on Wage Rates, Food Security and Rural Urban Migration -A study in Assam.
- Subject & Nature of the Survey: Field Survey, data collection, tabulation, compilation, and report writing.
- Contact details of the office along with e-mail id: Director, Agro-Economic Research Centre for North-East India. Assam Agricultural University Campus. Jorhat-785013

**Introduction of the Survey with objectives:** India is a country of villages and about 50 per cent of the villages

have very poor economic condition. In Assam, a large percentage of population i.e. more than 85 per cent of the total population still lives in rural areas. Indebtedness, unemployment, unproductive expenses, low level of productivity, lack of adequate basic needs and minimum services are very common problems of the villagers of Assam. In the state, there are more than 26,312 villages constituting 4.12 per cent of the total numbers of villages in India as per 2001 census. The Directorate of Panchayat and Rural Development, Assam has two wings. One is Panchayat Wings and other is Rural Development Wings. Both the wings have been implementing various state and centrally sponsored schemes through 21 Zila Parishad, 219 blocks, 189 Anchalik Panchayat and 2202 Gram Panchayat, covering 27 districts. Keeping in view to this large chunk of rural population, the father of nation, Mahatma Gandhi had given much emphasis to the concept "gram swaraj", which deals with economic, political and cultural freedom of the villagers for all rounds of developments of rural India. His concept of Swaraj is associated with more political freedom for socio-economic development of the village people through Panchayati Raj. Although the Panchayats have historically been an integral part of rural life in India, but Panchayati Raj was formally introduced only in 1959. In 2009-10, it has been rechristened as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). The act aims at enhancing at least one hundred days of guaranteed wage in a financial year to every household whose adult members volunteer to do unskilled manual work. The Act also emphasizes to uplift the rural economy in terms of livelihood, income, employment and income distribution. In addition to this, it has taken a special care to empower women by reducing gender differences in wages and their children. The Act also mandates 33 per cent participation for women in NREGA work programmes. The NREGA implemented by the Ministry of Rural Development is the

flagship programme of the Central Government that directly touches the lives of the poor and promotes inclusive growth. The National Rural Employment Guarantee Act was notified on September 7, 2005 and was the first of its kind in the world. It was brought under per view of an act for rural employment at an unprecedented scale in order to provide employment when other employment alternatives are scarce or inadequate. The Act came into force on February 2, 2006 and was implemented in a phased manner. Phase-I (notified in 200 districts with effect from February 2<sup>nd</sup> 2006), Phase-II (extended to 130 districts in the financial year 2007-08 (113 districts from April 1<sup>st</sup> 2007 and 17 districts of UP were notified with effect from May 15<sup>th</sup> 2007) and Phase-III (remaining

districts in all the States/UTs were notified from April 1st 2008).

Main Objectives of the Study: Keeping in view to the above observations, the present study was carried out in Assam with the following objectives

- Measure the extent of manpower employment generated under NREGA, their various socio-economic characteristics and gender variability in all the districts implementing NREGA since its inception in the selected states.
- To compare wage differentials between NREGA activities and other wage employment activities. Effect on NREGA on the pattern of migration from rural to urban areas.

- To find out the nature of assets created under NREGA and their durability. Identification of factors
  determining the participation of people in NREGA scheme and whether NREGA has been successful in
  ensuring better food security to the beneficiaries.
- To assess the implementation of NREGA, it's functioning and to suggest suitable policy measures to further strengthen the Programme

**Coverage**: In this study an attempt has been made in order to highlight of State NREGA in employment generation in 27 districts in general and 5 sample districts viz., Bongaigaon, Cachar, Dibrugarh, Nagaon and Sonitpur of Assam.

Sampling Design: The study is based on both primary and secondary data. From each district, two villages were selected keeping into account their distance from the Head Quarter. One village is selected from the nearby periphery of around 5 kilometers of the district Head Quarter and the second village is selected from a further location of 15 kilometers or more. From each selected village, primary survey is carried out on 20 participants in NREGA and 5 non-participant workers as wage employed. In this fashion, altogether 10 villages are surveyed in detail to construct a baseline for the sake of comparison. For selecting participant households, a list of all beneficiaries (participants) in the village is obtained from the Gram Panchayat or Programme Officer in the village along with the information of caste factor of the workers. After getting the list, a Stratified Random Sampling Method is adopted for selection of the participant households giving proportionate representation of the Caste, i.e. (i) Schedule Caste (ii) Schedule Tribe (iii) Other Backward Caste (iv) Forward Castes (other). In this regard, a point to be noted here is that the population of villages of Assam usually is homogeneous in caste structure. Therefore, caste wise stratification could not be done. But utmost care is taken to include different caste in selection of samples as a whale. attention is also Due paid to the gender factor. selection of non-participants. such list is available. Therefore, the the no nonparticipant households are randomly those households selected from that are not participating in NREGA but constitute the similar caste and gender characteristics as that of selected participant households to maintain the uniformity and to avoid the selection bias. While selecting the districts, prescribed guidelines are followed. In addition to household questionnaire, a village schedule is also designed to capture the general changes that have taken place in the village during the last one decade and to take note of increase in labour changes for agricultural operations after the implementation of NREGA. The village schedules also have qualitative questions relating to change in life style of the villagers that are taking place during the period under reference. One village schedule in each village is filled up with the help of a Group Discussion with the Panchayat Members, Officials, educated person and other well informed inhabitants of the villages.

**Field Work:** Field Work has done by a special schedule covering the objectives of the study by personal interview through above methodology

**Data processing:** The data is processed by various mathematical & statistical tools and implements through socio-economic condition of the sample farmer, employment and unemployment, demographic profile, wages etc. **Major Findings:** The NREGA can be considered as a new life line of the rural people who earn their livelihood as wage earners. It gears up the social relationship among the rural people which is a pre requisite condition to build a strong society or a nation. It also reduces the gender differences for some selected works. It is also observed that female workers, both urban and rural, received lesser wages than that of their male counterparts for doing the same set of jabs. The Act of the NREGS removed the gender difference in wages. The participation of women folk in works was made compulsory as per the Act of NREGA. Accordingly, there must be at least 33 per cent participation for women. The provision for caring minor children in the work site of the

NREGS is an extra advantage. It has been observed during field investigation that most of the households earned their livelihood as unskilled casual labourers. Only, a few households' possess own cultivated land. They usually go for Kharif paddy cultivation and a few households go for Rabi crops, mainly vegetables to meet the household need only. Very few households could sell their produce as the production was not sufficient due to inadequate coverage of area and low yield rate. Asset positions of most of the households were in a pathetic condition. They had no option other than to go for wage earning or to act as petty vegetable vendors. Even as wage earners, they do not get work for every day. They have to sit idle for at least for 3 to 4 days in a week. Most of the households lived below the poverty line. Other socio-economic indicators were also far from satisfactory level. However, BPI rice at subsidized rate under the scheme and Antyodaya Anna Yojona (AAY) are giving a relief to the selected families to overcome the food shortage. In Assam, about 22.30 per cent people are still living under poverty line. The implementation of NREGS activated the Panchayati Raj system which was almost in a dormant state prior to its introduction. Age group wise classification of sample households, a sizable share of population is in the age group 60 & above. It proves that expectancy of life is increasing on account of improvement of medical care, etc. By and large, the NREGS is a ray of hope for this section people and it is an opportunity for them to take part in the development agenda of the country with dignity. However, the NREGS may have an adverse effect on availability of labourers for agricultural operations. Since labourers prefer to work under NREGA on account of less supervision and less work, that too, in groups with some other facilities, the farmers are bound to compete among themselves to offer higher wages to meet the shortage labourers in peak season which consequently increase the cost of production. If the farmer fails to bear the rising expenditure incurred in farming, they will have no option but to switch over from farming to other activities to earn their From the observations and personal interviews, it can be inferred that scheme could not fulfills its commitment of providing 100 days of employment in a year to the rural workers and it failed to create assets convincingly as desired but it seemed to have paid good political dividends for the governments.

# Study No.5: Impact of Emerging Marketing Channels in Agriculture –Benefit to producer –Sellers and Margins of orange and potato in Assam

1. Year/ month of initiation: Sept.2009

2. Year/month of completion: 2011

- 3. Name of the Executing Office/Organization: Agro-Economic Research Centre for North-East India. Assam Agricultural University. Jorhat-785013
- 4. Name of the Survey: Impact of Emerging Marketing Channels in Agriculture –Benefit to producer –Sellers and Margins of orange and potato in Assam.
- 5. Subject & Nature of the Survey: Field Survey, data collection, tabulation, compilation, and report writing.
- 6. Contact details of the office: Director, Agro-Economic Research Centre for North-East India. Assam Agricultural University Campus.Jorhat-785013

Introduction of the Survey with objectives: Agricultural market reforms have been introduced in India since the Eight Five Year Plan (1992-97). As the Government needs to depend more on market forces for price stabilization and regulation, planning is now indicative more on private sector as it has a greater role to play. Normally, the market mechanism favours the richer section of the society and the poor growers are always remain at the receiving end. Hence, under new mechanism, provisions have been made to make the markets

friendly towards the growers by fixing the minimum support prices. Else, the efficiency of production, skill formation, adoption of technology and generation of marketable surplus get adversely affected. It has to be accepted that no mechanism in the market can equally distribute the fruits of development to all parts of the country at a time.

Over the years, the Government of India set up several Committees and Expert Groups to suggest the direction of reforms in the field of agricultural marketing. The first was in the line was Expert Group on Agricultural Marketing (Acharya) constituted by the Union Ministry of Rural Development in 1998. Following the constitution of this Expert Group, a major structural change occurred leading to the transfer of agricultural marketing division of Union Government from the Ministry of Rural Development to the Ministry of Agriculture. In December 2000, the Union Ministry of Agriculture constituted an Expert Committee on Strengthening and Developing Agricultural Marketing System in the Country. This Committee (Guru Committee) reviewed the entire system of agricultural marketing in the country and submitted its specific recommendations to the Government in June 2001. The Expert Committee's recommendations include various legislative reforms as well as reorientation of policies and programmes (Government of India, 2001).

In India, with growing distortions in the supply chain for agricultural commodities, there is need for greater efficiency in the supply chain. The emerging marketing channels are supposed to reduce the transaction costs and ensure that the high margins that certain intermediary agents get in the regular marketing channels is reduced. Some of the emerging channels include group-marketing, e-trading, direct marketing, contract farming, modern terminal markets, future trading, ITC Choupal, self-help groups and NGOs in the marketing chain.

Agricultural marketing functions are considered as the main planks of economic development in a state like Assam. An efficient marketing system is indispensable for the success of the agricultural production programme, which is launched in recent years. Marketing is an important link in the chain of production activities of agriculture sector. Organised marketing therefore, is a precondition to sustain production programme, more particularly, in respect of horticultural production. Marketing of horticultural crops in Assam is largely unorganized and predominantly in the hands of intermediaries such as retail traders, wholesalers, the pre- harvest contractors and others.

At present, the area under horticultural crops in Assam is 5.40 lakh hectares, which is 14 per cent of the net cropped area of the State. This sector annually produces 14.02 lakh MT of fruits, 39.16 lakh MT of vegetables, 2.18 lakh MT of spices besides nut crops, flowers and medicinal & aromatic plants (Economic Survey 2009-10 (Govt.of Assam). The state is surplus as regards to fruits, vegetables and spices production. The important fruit crops grown include orange, pineapple, banana, lime lemon, jackfruits, guava, litchi, mango etc. and more than 10 minor fruits. In case of vegetables, mention may be made of potato, various cole crops and brinjal. Major spices grown are chilly, coriander, black pepper, ginger and turmeric. It is expected that the study, once accomplished, will be useful to assess the efficacy of the emerging marketing channels *vis-à-vis* regular marketing channels in Assam.

**Objectives:** The study is proposed with the following main objectives:

• To estimate the share of the farmer in the consumer rupee in emerging marketing models *vis-à-vis* the traditional marketing channels.

- To estimate the degree of market efficiency and incidence of post-harvest losses in emerging marketing channels vis-à-vis traditional channels.
- To study the superior market practices and services provided by different agencies in the emerging marketing channels vis-à-vis traditional marketing channels.
- To study the constraints faced by the farmers and different market functionaries in the emerging marketing channels vis-à-vis traditional marketing channels.

**Coverage:** The study covers two horticultural crops – Orange and Potato of two districts Tinsukia and Nogaon respectively.

**Sampling Design:** The Primary data have been collected by using specially designed interview schedules and questionnaires supplied by the coordinating centre (Institute of Economic Growth, Delhi) for the project involving

- Farmers
- Buyers
- Retailers and
- Consumers

The sample sizes for the survey (as per the coordinating centre) are presented in Table -1.1

Table-1.1

#### Respondent wise sample sizes of the survey

Deemandente	Crop 1(Orang	je)	Crop 2 (Potato)		
Respondents	Traditional Marketing Channel	Emerging Marketing Channel	Traditional Marketing Channel	Emerging Marketing Channel	
(1) Farmers	50	50	50	50	
(2) Buyers	5	5	5	1	
(3) Retailers	5	-	5	-	
(4) Consumers	15	15	15	15	

A focused group discussion with the members (5 nos.) of the market committees was also conducted in order to get a clear picture of market charges, market practices and market infrastructures. The Modified Measure of Marketing Efficiency (MME) (Acharya's approach) was calculated using the formula: MME=FP/(MC+MM), where FP is the price received by farmer, MC and MM are marketing costs and marketing margins, respectively. The secondary data are collected from various sources including National Informatics Centre, and other State/District level published Government sources for the chosen districts

<u>viz</u>.-Tinsukia and Nagaon of Assam. The State Marketing Act, By-laws and Regulations of State Marketing Board were accessed; analyszed & inferences were drawn accordingly.

**Field Work:** Field Work has done by a special schedule covering the objectives of the study by personal interview through above methodology.

**Data Processing :** The data are processing different Heads viz, Market, producer, seller, Demographic pattern, education, land utilization, area, production, yield of the crop, income and expenditure etc. by simple mathematical and statistical formula.

**Major Findings:** The study has highlighted that the prospect of horticultural crops in Assam is bright provided the marketing facilities and the needed infrastructural supports are ensured. The study has adequately focused that with the establishment of fruit processing industry and improvement of marketing net-work may go a long way in commercialization of horticultural crops in Assam. It has also been revealed that due to lack of infrastructural support and sound marketing net-work, the orange and potato growers have been deprived of remunerative prices for their total marketable surplus and are not in a position to minimize the post-harvest losses at various stages of marketing.

However, the farmers have been benefited by selling their produce through EMC in case of orange & potato. But the marketing operations under EMC is still at an infant stage and many more actions in the line of policy suggested are to be taken to ensure an efficient agricultural marketing system in the state of Assam.

# **Animal Husbandry & Veterinary Department, Assam**

#### INFORMATION ON SAMPLE SURVEYS

- Year / month of initiation: March
- Year/ month of completion (if completed): February
- Name of the Executing officer/ Organization: Statistical Section under the Directorate of A.H. & Veterinary.
- Name of the Survey: Integrated Sample Survey.
- Subject & Nature of the Survey: A study on the estimation of milk, egg and meat. Nature of the study is seasonal.
- Contact details of the office along with e-mail id: Contact No. of Director- 03612668609

**Introduction of the survey with objectives:** The estimation of production of milk, egg and meat in the state of Assam is done under 'Integrated Sample Survey 'a centrally sponsored scheme following the technical supervision of Technical Committee of Direction, Ministry of Agriculture, Govt. of India. The scheme presently is a centrally sponsored one in the Department of Animal Husbandry having the expenditure on salary between centre and state on 50:50 basis. The Technical Committee of Direction approves the estimates of Integrated Sample Survey. The main objective of the survey is to make available current estimates on livestock numbers and production of livestock products on a regular basis and also to study Animal Husbandry attendant practices being adopted in different parts of the state.

**Coverage:** The Integrated Sample Survey covers 25 Districts of entire state of Assam.

**Sampling Design:** The plan of sampling design adopted for the survey is one of the three stages of stratified random sampling for each season out of three seasons comprising of four months in a season. The entire state is divided into strata as many as number of districts. Village of each district is the first stage, household in the village is second stage and livestock/ poultry in the selected household is the third stage. In each season complete enumeration of animals in the household of the selected villages is done in the first month while detail study about livestock/poultry is conducted in the subsequent months of the season.

Field work: In order to conduct sample survey a year is divided into three seasons as follows:

Summer season : March to June Rainy season : July to October

Winter Season : November to February.

In the field the data are collected by the field level enumerators and supervised by the Sub-Inspector or Inspectors.

**Data processing:** When the field data reaches the Head Quarter, they are analyzed and estimation is prepared seasonally for the seasons. An annual report is also prepared on the basis of seasonal reports and submitted to the Animal Husbandry Statistics Division for necessary scrutiny. After the approval is received from the Technical Committee of Direction, the report is made for public.

Major Findings: Integrated Sample Survey Report for the Year 2009-10; 2010-11 & 2011-12.

Year	Milk	Egg	Meat
	(in million liters)	(in lakh nos.)	(in 000 tonnes)
2009-10	830	4684	31.5
2010-11	833	4700	34
2011-12 (provisional)	838	4708	33

## Directorate of Economics & Statistics, Bihar

- 1. Survey on "Household Consumer Expenditure & Employment and Unemployment" (NSS 66<sup>th</sup> Round).
  - Objective: To Know about Indicator of level of living, Monthly Per Capita Expenditure. MPCE can
    also be used to measure the level of inequality. To estimate the employment and unemployment
    characteristics at National & State level. The Statistical indicator on labour market a required for
    planning, Policy and decision making at various level both within Government and outside.
  - Geographical Coverage: Bihar state.
  - Sampling Design/Methodology: A stratified multi-stage design has been adopted for the 66<sup>th</sup> round survey. The first stage unit (FSU) will be the 2001 census villages in the rural sector and urban frame survey (UFS) blocks in the urban sector. The ultimate stage unit (USU) will be households in both the sectors. Incase of large FSUs, one intermediate stage of sampling will be the selection of two hamlet groups (hgs)/sub blocks (sbs) from each rural/urban FSU.
  - Coverage/Sample Size: NSS 66th round- 416 (Rural) + 160 (Urban) =576
  - Period of Survey: 1.7.2009 to 30.06.2010.
  - Name of the Agency which conducted the survey: DES, Govt. of Bihar, Patna.
  - Name of the sponsoring Agency: NSSO, Ministry of Statistics and Programme Implementation, Govt. of India, New Delhi.
  - Conclusion /Finding: Table generation in process.
- 2. Survey on "UN incorporated non-agricultural Enterprises in Manufacturing, trade and other service sector (excluding construction)" (NSS 67th Round).
  - **Objective:-**. To know the prime source of Statistical indicators on organized sector of Manufacturing, trade and other service sector enterprises. Results indicate status of enterprise as well workers engaged in it.
  - Geographical Coverage: Bihar state.
  - Sampling Design/Methodology: A stratified multi-stage design has been adopted for the 67<sup>th</sup> round survey. The first stage unit (FSU) will be the 2001 census villages in the rural sector and urban frame survey (UFS) blocks in the urban sector. The ultimate stage unit (USU) will be enterprises in both the sectors. Incase of large FSUs, one intermediate stage of sampling will be the selection of three hamlet groups (hgs)/sub blocks (sbs) from each large rural/urban FSU.
  - Coverage/Sample Size: NSS 67th round- 456 (Rural) + 336 (Urban) =792.
  - **Period of Survey:** 1.07.2010 to 30.06.2011.
  - Name of the Agency which conducted the survey- DES, Govt. of Bihar Patna.
  - Name of the sponsoring Agency: NSSO, Ministry of Statistics and Programme Implementations, Govt. of India, New Delhi.
  - Conclusion /Finding: Data validation and updation completed.

- 3. Survey on "Household Consumer Expenditure & Employment and unemployment" (NSS 68<sup>th</sup> Round)
  - **Objective:** To know prime source of statistical indicator on social consumption and well-being, level of living and inequality thereof and for estimating various parameters of factors market of labour and activity participation of the population.
  - Geographical Coverage: Bihar state.
  - Sampling Design/Methodology: A stratified multi-stage design has been adopted for the 68th round survey. The first stage unit (FSU) will be the 2001 census villages in the rural sector and urban frame survey (UFS) blocks in the urban sector. The ultimate stage unit (USU) will be households in both the sectors. Incase of large FSUs, one intermediate stage of sampling will be the selection of two hamlet groups (hgs)/sub blocks (sbs) from each rural/urban FSU.
  - Coverage/Sample Size: NSS 68th round- 416 (Rural) + 160 (Urban) =576.
  - Period of Survey: 1.7.2011 to 30.06.2012.
  - Name of the Agency which conducted the survey- DES, Govt. of Bihar, Patna.
  - Name of the sponsoring Agency: NSSO, Ministry of Statistics and Programme Implementations, Govt. of India, New Delhi.
  - Conclusion /Finding: Data processing is initiated.

#### 4. Survey on Annual Survey of Industries, 2010-11

**Objective:** - Annual Survey of Industries (ASI) is the principal source of Industrial Statistics of any state. It provides statistical information to access and assess objectively and realistically the changes in the growth, composition and structure of organized manufacturing sector comprising activities related to Manufacturing process, Repair services, Gas and Water Supply and Cold storage.

Keeping in view the importance of this statistics in examining the level of industrialization in the state as well as accurately identifying the grey areas, needing immediate attention, the State Govt. has decided to start ASI(State Sample) for the first time in the state from 2010-11.

**Geographical Coverage: -** The whole of Bihar State.

**Sample design and Sample selection: -** Central Statistical office (Industrial Statistics Wing) designs the sample for the Annual Survey of Industries (ASI). Frame prepared for all the factories are updated annually and divided into two sector, i.e. Central and State Sample.

After selecting central and state sample, remaining units in the sample sector is treated as residual frame for selection of sample units for the states/UTs. For the purpose of selecting samples from the residual frame for the state/UTs stratification is done afresh by grouping units belong to district X 3-digit NIC code for each state to form strata. Considering sampling fraction of 10% in general within each stratum, the sample units are then drawn circular systematically from each stratum.

Coverage/Sample Size: For ASI-2010-11. State sample size was 719.

**Period of Survey :-** Sept. to April Every financial year for all items in a calendar year. As ASI-2010-11 was the first attempt by the state, due to procedural delay the survey was scheduled for March, 2012 to Feb. 2013. The field work has been completed in Oct. 2012.

Name of the Agency which conducted the survey:- DES, Deptt. of Planning and Development, Govt. of Bihar.

Name of the Sponsoring Agency: CSO(ISW). Kolkata, Ministry of Statistics and Programme Implementation , Govt. of India.

**Conclusion/ Finding: -** Field work has been completed. The work of data of schedules as per guidelines received from CSO (ISW), is in progress. Hence, findings are still awaited.

# Directorate of Health Services, Govt. of Goa, Health intelligence Bureau

1. Year/Month of initiation: 2010-11

2. Year/month of completion (if complete) Dec 2010

3. Name of Executing office/organisation: Govt. of Goa, Health intelligence Bureau,

4. Name of Survey: "A study on Socio Economic Status of Unmarried Pairs visiting Moll and its impact".

5. Subject & Nature of the Survey: Socio Economic status of Unmarried Pairs

6. Contact details of the office along with e-mail id: Shri Anil Kumar,

Deputy Director
Programme In-charge
Health Intelligence Bureau,
Directorate of Health Service

Campal, Panaji-Goa

#### Details information on:

Introduction of the survey with objectives:

"A study on Socio Economic Status of Unmarried Pairs visiting Moll and its impact".

Coverage
 85% unmarried pairs at Vashi, Moll, Mumbai

Since 11.05 a.m. to 4.15 p.m.

Sampling Design
 85% Unmarried pairs at Vashi, Moll, Mumbai since

11.05 a.m, to 4.15 p.m.

\* Field work visiting Moll

\* Data Processing Manual

Year/Month of initiation:
 Year/month of completion ( if complete)
 Name of Executing office/organisation:
 Govt. of Goa

Health intelligence Bureau

Directorate of Health Services

4. Name of Survey: "Knowledge and Awareness of Nurses about HIV/AIDS in Goa".

5. Subject & Nature of the Survey: knowledge and awareness of Nurses about HIV/AIDS in Goa.

6. Contact details of the office along with e-mail id: Shri Anil Kumar,

Deputy Director
Programme In-charge
Health Intelligence Bureau,
Directorate of Health Service

Campal, Panaji-Goa

#### Details information:

Introduction of the survey with objectives:
 Introduction of the survey with objects: Knowledge and Awareness of Nurses about HTV/AIDS in Goa".

• Coverage 10% Nurses of different Hospitals.

Sampling Design
 10% Nurses of different Hospitals.

11.05 a.m, to 4.15 p.m.

Field work
 Hospital based

Data Processing Manual

# Surveys Conducted by Directorate of Animal Husbandry-Gujarat

1.Year/month of Initiation	2009-10 :- 1st March to 28th February
	2010-11:- 1st March to 28th February
	2011-12:- 1st March to 29th February
2.Year/month of completion (if completed)	2009-10 :- 1st March to 28th February
	2010-11:- 1st March to 28th February
	2011-12:- 1st March to 29th February
3.Name of the Executing Office/organization	Directorate of Animal Husbandry
4.Name of the Survey	Integrated Sample Survey
5.Subject & Nature of the Survey	Estimates of Major Livestock Products
6.Contact details of the office along with e-mail id	Directorate of Animal Husbandry
	Krushibhavan, Sector-10/A,
	Gandhinagr-382010
	E-mail id:- dir-anml@gujarat.gov.in

# **Brief of Integrated Sample Survey Scheme:**

**Introduction:** Integrated Sample Survey (ISS) to estimate the seasonal & the of major livestock products i.e. milk, eggs and wool is being conducted since 1977-78, which has been further, strengthened to estimate district level production since 1983-84.

**Object:** The government implements various development programmes in the livestock sector through the Department of Animal Husbandry envisaging both qualitative and quantitative improvement in the sector. This survey helps the government to formulate scheme, planning& processing.

Objective of the survey:-

- (1) To estimate season-wise & annual milk, egg & wool Production.
- (2) To workout average population yield estimates.

- (3)To estimate dung production.
- (4)To workout average feed &fodder consumption.
- (5) To study trend of population, yield& production

**Coverage:** The survey has been conducted in 20 % sample villages covering all the 26 districts of the state.

**Period of field work:** The data for the survey were collected during all the three seasons, the fieldwork of the survey commences on the first day of the march every year and comes to an end on the last day of February of the next year.

- (1) Summer season -- March to June
- (2) Rainy season -- July to October
- (3) Winter season --- November to February

Sr. No.	Item	Date(s) / Period(s) of reference
1	Milk, Egg, Dung, production	As on the date of the survey
2	Wool Production	As on the date of survey
3	Feed &Fodder Consumption	As on the date of survey

**Sampling design:** In first stage, list of all villages is framed out, and in second stage, listing of all households in the village is carried out. Sample of 20 % villages is selected every year without replacement so as to cover all 100 % villages within five years. Village & household selection has been done through random selection method.

#### (A) For first stage selection: -

Every year to select 20 % sample villages in each district, in the first stage, the talukas are considered as strata for each district and 20 % number (1/5 of total No. Of villages) of villages is allocated to each taluka in proportion of total number of villages in that taluka. The allotted number of villages are selected from each taluka by random and 1/3<sup>rd</sup> villages are surveyed in each season. Out of which 15 villages in each district are surveyed for detailed management. They are selected keeping in view the presentation of all talukas, For these villages, detailed management study is conducted for selected households and such households are randomly selected as second stage units as explained in (B) below:

## (B) For second stage selection: -

For second stage selection of households total number of households is enlisted in the selected village. In each season round wise households are selected at random as below. The ultimate sampling unit is animals in selected household.

**Special Notes:** - In case if household with Crossbred cow, Sheep, Goat or Poultry are not available in selected village. Extra sample is permitted from nearby village(s). For each season the remaining selected villages other than 15 selected villages for detailed management are surveyed for population part and detailed listing of households and animals is done in schedule no 2.

In case household with C.B. cow, sheep, goat or poultry are not available in selected village, extra sample is permitted from nearby village/villages. If sample Households do not represent particular dominating category of Households of village, last two Household will be selected without random from that category.

**Schedule of the survey:** Schedule of survey details are given below:

ScheduleNo.	Item
Village Schedule –1	Genera Information about village From Talati and Mantri& No. of house hold of Last Census data of Village.
Village Schedule –2	Listing of House Hold to be filled during first round for each season.
Schedule – 1.1	Selection House Hold for Management
Schedule – 1.2	Households wise Management Practices of Cattle and production of Milk.
Schedule – 1.3	House hold wise Poultry Management Practices and No. of Layer and eggs productivity
Schedule – 1.4	Wool Yield& Sheep Breeding Practices
Schedule – 1.4 A	Shearing of Sheep
Schedule – 1.5	House hold wise Management Practices and productive population of milk Production of Goat.
Schedule – 1.6	Poultry Farminformation for Eggs, Layers & Broilers Farm
Schedule – 1.7	Exotic / Cross-bred Cow Milk Yield

**Estimation of procedure:** The estimation procedure for obtaining estimated number of in-milk animals, milch animals, average milk yieldper day per in-milk animal, per milch animal and total milk production& similarly the estimates of number of layers, average egg yield per season/annum and total egg production were followed as per the methodology prescribed by Government of India, Ministry of Agriculture, Department of Animal Husbandry, Dairing& fisheries, New Delhi.

Main findings of Integrated Sample Survey (ISS)

- \* To estimate season wise & annual milk, egg & wool production.
- \* To work-out district wise, season wise & annual average yield estimate.
- \* To estimate annual dung production.
- \* To work out average feed & fodder consumption season wise.
- \* To study trend of production and yield..
- \* Broiler production estimate as per information received from poultry branch (only district wise annual information.)
- \* To workout milk and egg utilization (season wise)
- \* Meat production annual district wise information received only 38 registered slaughter houses.

# Evaluation of Maternal and Child Health (MCH) Services in Gujarat by District Level Rapid Household Survey, Health & Medical Services and Medical Education, Govt. of Gujarat Introduction of the Survey with objectives

Gujarat state of India has come a long way in improving the health indicators since independence, but progress in reducing vital rates (CBR, CDR, IMR, MMR etc.) has been slow and largely unmeasured or documented. There are several challenges for reducing these vital statistics to the targeted to assess progress towards achievements of MDG. In spite of several national level surveys (NFHS & RCH) there are several challenges yet to be addressed to know the reach of the services being imparted to the resident population in an area. Government of Gujarat has initiated its efforts to know the status of some important MCH service indicators as well vital statistics at district level and the state level in the state of Gujarat

Background: The dramatic economic growth and food surplus witnessed in India in recent times have unfortunately not had the desired health impacts on two of the most vulnerable population groups, viz., women and children. High rates of maternal mortality in the country suggest that childbearing, which continues to be a primary role for the majority of Indian women, is far from safe; in addition, the country also has embarrassingly high rates of infant and child mortality. Thus it is unlikely that India will be able to achieve MDGs 4 and 5 by the targeted date. Recognizing the short comings of the health care system to effectively deliver the most crucial services for a safe pregnancy and delivery as well as ensure child survival, the Ministry of Health and Family Welfare, Government of India, launched a major initiative, the National Rural Health Mission (NRHM) in 2005 to carry out various corrections in the basic health delivery system. Among other things suggested in the Plan of Action under the NRHM is the increased allocation of public funds on health, optimize health manpower, ensure community participation and ownership of assets and upgrade community health centres (CHCs) into functional hospitals that conform to the Indian Public Health Standards. A major paradigm shift has occurred under the NRHM focusing on decentralized planning, a pro-poor more equitable health system, and rightsbased service delivery. Community participation is envisaged in the form of Village Health and Sanitation Committees and appointment of a cadre of grassroots volunteers- the Accredited Social Health Activist (ASHA) at the village level. Simultaneously, RogiKalyan Samitis (RKS) have also been established at various levels of health facilities to ensure monitoring of health activities and proper utilization of funds allocated for the same.

In addition to implementing the various activities envisaged under the NRHM, the Government of Gujarat is implementing special schemes such as the Chiranjeevi Yojana and the Mid-Day Meal to save maternal lives and fight against malnutrition. To consolidate and redouble the efforts to curb maternal and child mortality, the NirogiBalakYojana has also been launched since 2000. Furthermore, to tackle neonatal mortality, which accounts for almost three-fifths of infant mortality in the state, the BalSakha Yojana as part of public-private partnership (along the lines of the Chiranjeevi Yojana for increasing institutional deliveries), has also been launched to provide high quality neonatal care, by a qualified pediatrician, especially to newborns of BPL mothers who are most likely to be "at risk". To further ensure better reach of maternal and child services, the Government of Gujarat was the first to launch a programme, the e-Mamta, whereby health workers are enabled to track all pregnant women in their area and provide timely antenatal services and subsequently also provide immunization services after childbirth.

In view of these recent developments in the national programme and certain initiatives also launched by the state government, it becomes essential to have periodic estimates on various parameters of maternal and child health to understand the impact of the programme and take remedial action where necessary. In spite of periodic conduct of several national and state level surveys, such as NFHS and DLHS over the years in the country, there are major challenges yet to be addressed to ascertain the reach of the services, particularly among the vulnerable sections of the population in a district and such feedback should be on a regular basis and quick enough for remedial action where necessary. In this regard, Government of Gujarat has initiated efforts to assess the status of maternal and child health as well as the changes in the level of fertility and infant mortality that occurred at the district level, to understand the impact of the various programmes in the state, by hiring their one of the empanelled consultant of Gujarat Social Infrastructure Development Board Society (GSIDBS). The present first round District Level Rapid Household Survey (DLRHS-I) is an attempt in this direction.

**Objective:** The main objective of the present DLRHS is to evaluate focused MCH and Family Planning indicators, covering particularly the following aspects:

- Coverage of antenatal check-up and related immunization and nutrition services
- Institutional/safe deliveries
- JSY/ CY beneficiaries
- Post- natal check- up and neonatal care
- Child feeding practices
- Child immunization and vitamin A supplementation
- Diarrhoea and ARI management among children
- Contraceptive prevalence rates and use of spacing methods

Besides, an attempt is made to identify events of births and deaths in the surveyed population to provide some crude vital indicators (Birth; Death; under five; infant etc.) to judge the performance of MCH and FP services at the district as well as the state level.

**Sample Coverage:** The present survey (DLRHS) could actually cover a total of 1, 14,675 households and 99,207 currently married women (CMW) age 15-49 years, enumerating 390 PSUs (224 rural and 128 urban), in the state of Gujarat.

- The response rates are 94 and 96 percent for households and currently married women respectively.
- The present study is based on sampled *de jure* population of 5, 14,888 persons, of whom 66.5 percent lived in the rural areas of Gujarat.

**Sampling Design:** A multi-stage systematic sampling design was adopted for DLRHS. In each district, a total of 15 primary sampling units (PSUs) which are census villages in rural areas and census enumeration blocks (CEBs) in urban areas, were covered. In rural areas, first villages were selected by probability proportional to size (PPS) systematic sampling and at the second stage all the households in the PSU were selected after the segmenting the selected village as mentioned in the relevant section.

For urban areas, first wards were selected by PPS systematic sampling, followed by selection of CEBs at the second stage by PPS sampling and selection of all the house-holds in the selected PSU were selected at the third stage. The Census of India, 2001 was used as the sampling frame for the present survey. To provide reliable estimates of various demographic and health indicators, such as, the level of immunization, antenatal check-up and institutional delivery as well as the vital rates (based on recent births to women in the households), the number of households representing a district is range in between a minimum of 2,725 to maximum about 4,750, depending on its population size. The sample size of the district also takes care of nonresponse. Thus, the study was expected to cover about 117,000 households, from all the 26 districts in the state of Gujarat.

The PSUs were allocated to rural and urban areas of each district proportionally to the actual rural-urban population ratio (2011 census) and within the rural-urban domains. It was proposed to cover, on an average, 300 households per PSU in the rural areas, while it was 150 households per CEB in the urban areas. It may be noted that segmentation procedure was adopted in those PSUs where the total number of households in the selected PSU exceeded the targeted sample size. Further, to make a proper rural PSU, selected villages with less than 300 households were linked with another contiguous village. As mentioned earlier, selected villages with more than 300 households were divided into two or more segments and one segment of 300 HHs was randomly selected so as to have standard size PSUs. All the currently married women (CMW) age 15-49 years from the sampled households were the respondents for the Woman's Questionnaire on pregnancy history, RCH and family planning, while any adult household member was the respondent for the Household Questionnaire in DLRHS. Two main instruments namely, Household (HH) and Currently Married Woman (CMW) were used to collect data in DLRHS. These questionnaires were developed in local Gujarati language and were pre-tested before their finalization and printing.

#### Field Work

- Household Questionnaire: The household questionnaire listed all usual residents in each sample
  household including those who were temporarily out (but excluding any visitors). For individual
  household members, information on age, sex, marital status and relationship to the head of the
  household were collected. Information on births and deaths that occurred to the usual members of the
  household during three years preceding the survey was also recorded. Efforts were made to get
  information about infant and maternal deaths.
- Currently Married Woman's Questionnaire: The respondents to the currently married woman's questionnaire were married women age 15-49 years co-habiting with their husbands in the sampled households. Details on their age, age at marriage, age at cohabitation, educational attainment, number of biological children ever born and surviving by sex were collected. The details of the recent pregnancies and their outcome that occurred during five years preceding the survey were also collected. Additionally, based on women's recent births their detailed accounts of antenatal check-up, experience of pregnancy related complications, place of delivery, attendance at delivery, post natal care, neonatal care, child feeding practices, diarrhea and ARI management and child immunization including vitamin A supplementation were gathered in the woman's questionnaire. As mentioned earlier, for the recent births, immunizations status of children was collected either from the vaccination

card or by asking the mother about the status of immunization of the child. The final section of the questionnaire dealt with the history of contraceptive use in brief.

#### **Data Processing**

Field Operations and Quality Control: Actual field operations under DLRHS in all the districts of Gujarat state were implemented in a uniform manner. Data from the selected PSUs were collected by 13 teams, each consisting of 6 person's viz., 1 Supervisor, 1 Field Editor and 4 Female Investigators who had a graduate degree. The survey was carried out from May 2011 to October 2011 (with one month break due to heavy torrential rainfall). All the selected field staff was provided extensive training on various aspects of fertility, mortality, family planning and maternal and child health by the senior member of the project team and invited experts. They were also taught about interviewing technique and how to fill and edit Household and Woman's questionnaire. A separate training session was also organised for Editors and Supervisors to acquaint them about their roles and responsibilities during the field survey. Two-day field training was also arranged for the field staff, after the successful completion of five-day class room training. A minimum of two days visit to each sampled PSU was followed during data collection to ensure 100percent coverage of all the households and currently married women.

A strict quality check protocol was put in by way of spot and back check of a team. An individual with supervisory rank was placed throughout the period of the field work for supervising the survey operations. The field and office level monitoring and supervision of the data collection were also carried out by the consultant himself. The filled in schedules were brought to the headquarters (Baroda) for office editing and data entry. The analysis of data and their tabulation was done with the help of partly with CSR Pro and Statistical Software SPSS.

**Design of Report:** The report was divided into seven parts. Chapter one give the brief background of the survey with objective and sample designing; chapter two describes the back ground characteristic of household; chapter 3 provides characteristic of women fertility; chapter 4 of maternal health care; chapter five describe child health and immunization; chapter 6 about family planning, while chapter 7 on fertility and mortality and last chapter summarized the finding with recommendation.

#### **Major Finding:**

The salient findings of the survey are presented here.

#### 1) Sample Coverage:

- The present survey (DLRHS) could actually cover a total of 1, 14,675 households and 99,207 currently married women (CMW) age 15-49 years, enumerating 390 PSUs (224 rural and 128 urban), in the state of Gujarat.
- The response rates are 94 and 96 percent for households and currently married women respectively.
- The present study is based on sampled *de jure* population of 5, 14,888 persons, of whom 66.5 percent lived in the rural areas of Gujarat.

#### 2) Age Structure & Sex Ratio:

- The mean family size per household in the state is about 4.8 which is slightly higher (4.9) in rural areas than that noted in urban areas (4.6).
- The age-sex distribution of population of Gujarat depicts a scenario of declining fertility with a shrinking base, but yet a young and growing population with 30 percent below the age of 15 years.
- The overall sex ratio of 933 females per 1000 males is recorded for the *de jure* population in Gujarat. The sex ratio is more skewed (920) in favour of males, in urban areas compared to that (940) in rural areas. A similar pattern is noted across the districts, although the overall sex ratio (f/m x 1000) varies widely, from 995 in The Dangs district to as low as 884 in Surat district.
- The overall sex ratio for the 0-6 age group population in the state of Gujarat is very low and is about 893 females 1000 males, which however closely matches with 2011 Census figure of 886 for the state.
- As expected, the child sex ratio is more skewed (879) in favour of males, in urban areas compared to that (899) in rural areas.

#### 3) Religion & Caste:

- Of the total households interviewed in Gujarat, majority of the household heads are Hindu (93 percent), 6 percent are Muslim, and rest belong to other religions in Gujarat.
- About 19 percent of the households in Gujarat belong to schedule castes (SCs), 20 percent to schedule tribes (STs) and 40 percent to other backward castes (OBCs), while the remaining 20 percent of the households are headed by other castes.

#### 4) BPL and RSBY Cards:

- About one-third of households in Gujarat, as reported, fall under the BPL category, which however varies widely across the districts from less than 11 percent in Porbander to as high as 74 percent in Narmada.
- Most of the tribal districts are found to have BPL families in higher proportion. As expected, the proportion of BPL families is relatively much higher in rural areas than in urban areas.
- As regards the status of holding a BPL card in the household, majority of the households in most of
  the districts in the state reported that they do have a BPL card, although a very large proportion of
  households in certain districts could not produce them for verification.
- On an average, 47.1 of the household reported having RSBY card in Gujarat. Of Which about 27.7% do have a RSBY card, another 19.4% have RSBY card but could not produce it, and the remaining 52.9% reported having no RSBY card in Gujarat.
- The households reporting having RSBY card varied from low as one percent in Jamnagar to 52% in Tapi district.

#### 5) Birth & Deaths:

- It is satisfying to note that 95-100 percent of the households in almost all the districts reported to have registered births and majority of those who registered births, in each district do have a birth certificate.
- With respect to death registration, it is 89 percent at the state level. Among those households reporting death registration, majority of them (93-95 percent) do have death certificate.

#### 6) Demographic Characteristic:

- The proportion of non-literate women is still quite high in the state (30 percent) and in most of the districts, particularly in the districts of Banaskantha, Panchmahals, Dahod, Ahmadabad, Tapi, Patan, Jamnagar and The Dangs, where it is 35 percent or more.
- The mean current age of the CMW ranges between 32-34 years across the districts and it is about 33 years in the state.
- The mean age at first marriage among the CMW ranges between 18-21 years in most of the districts, except a few districts like Banaskantha, Sabarkantha, Gandhinagar and The Dangs, where it is less than 18 years.
- About one-fifth of the women in Gujarat are still getting married before completing the legal age of 18 years, while this proportion is much higher (25 percent) in rural than in urban areas (15 percent).
- With regard to childbearing practices, it is noted that mean age at first birth is almost same in the rural and urban areas of the state and ranges between 20-22 years across the districts.
- A significant proportion of births out of total births to CMW are still occurring among women age less than 20 years in Gujarat. It is about 8 percent in the state and is higher (9 percent) in rural than in urban areas (7 percent), indicating that teenage fertility is still high in the state.
- The proportion of births of order 3 and above is about 33 percent in the state and it ranges from as low as about 12 percent in Amreli and Navsari to as high as 53 percent in Dahod.

# 7) Children Ever Born (CEB):

- The mean number of children ever born to currently married women age 15-49, by district, varies from a high of 3.1 children in Dohad, followed by 2.8 in Panchmahals, to 2.0 to 2.1 children in Anand, Kheda and Valsad districts, while the state average is 2.4 children.
- As a more effective measure, the level of completed fertility as measured by mean number of children ever born to CMW of age 40-49 years is computed by district in Gujarat.
- The analysis reveals that 12 out of 26 districts are above the state average of 3.4 children, where women in these districts are ending up with 3.5-4.4 children in their reproductive life in Gujarat.
- In other words, these 12 districts have relatively much higher fertility than other districts in the state and need focused approach under the family planning programme.

#### 8) Ante-natal Care (ANC):

- The registration of pregnancy by the first trimester is still quite far from cent percent in Gujarat, as it is only 67-73 percent in rural and urban areas of the state.
- It is only in case of one-third of the districts in the state that more than 75 percent of the mothers had registered in the 1st trimester, while it is as low as 32 percent in The Dangs.
- With respect to specific antenatal care, it is noted that the proportion of mothers with at least 3 ANC check-ups is about 69 percent in the state as a whole, which varies from 28 percent in Amreli to 99 percent in Navsari, although it is more than 50 percent in majority of the districts in Gujarat.
- The proportion of mother who got least one dose of TT injection during their last pregnancy is as low as 36 percent in Amreli, although this proportion rises to at least three-fifths (62 percent) in other districts of the state.
- The state as a whole has done poorly with respect to this ANC indicator (64
- percent). The situation is relatively better in the urban (74 percent) than in rural areas (60 percent) in the state.
- The proportion of women who received 100 or more IFA tablets during their last pregnancy was lowest (9 percent) in Narmada and highest (58 percent) in Tapi, although it is less than 40 percent in majority of the districts. The state average is only 32 percent and it is slightly higher (35 percent) in urban than in rural areas (31 percent).
- The percent of mothers who received full ANC is not more than one-third in 21 out of the 26 districts in the state, while it is relatively better (38-52 percent) in the remaining districts viz. Bhavnagar, Jamnagar, Navsari, Surendranagar and Tapi. As a result, the overall proportion of mothers who received full ANC is only 26 percent in the state and it is slightly higher in urban (28 percent) than in the rural areas (25percent).
- The main services received during ANC visits are height/ weight measurement, BP check-up, blood test, abdominal check-up, and counseling for diet and delivery in most cases (92-99 percent), while services like breast examination, sonography and counseling for HIV/ AIDS were not provided in most cases.

# 9) Natal Care (Delivery):

- With regard to natal care, the data reveal that institutional delivery has improved substantially not only
  in the urban areas but also in the rural areas of most districts in the state.
- More than three-fourth of the deliveries were reported to be taking place in an institution across the
  rural and urban areas of the districts in the state, except the districts like Banaskantha, Panchmahal,
  Tapi, Surendranagar and The Dangs, where more than one-fourth of the deliveries are taking place at
  home and that too without the assistance of trained health personnel in majority of cases.
- The overall state average for institutional delivery is 87 percent which is slightly higher in urban (92 percent) than in rural areas (87 percent).
- With regard to mode of transportation used for the purpose of delivery, it is noted that about 37 percent of the mothers used 108 Ambulance, another 10 percent used CHC/PHC vehicle and as high as 53 percent used private vehicle.

• The results of total deliveries in Gujarat points out that, bout 86 percent were normal, 9.5 percent reported complication and 4.5 percent to be caesarean.

#### 10) MCH Schemes:

- The number of beneficiaries under CY is very small in most of other districts, the state average being only 13 percent.
- Most of the districts benefited under JSY, as the proportion of mothers reporting benefits under JSY varies from a minimum of 10 percent in Kheda to 69 percent in Tapi across the districts in the state.
- On an average, only about 23 percent of the mothers reported benefits under the JSY scheme in the state. Such beneficiaries are relatively higher in rural areas (27 percent) than in urban areas (17 percent).
- At the state level, about 48 percent of the beneficiaries received cash before
- delivery and the remaining 52 percent were paid after delivery under the JSY scheme.

### 11) Post Natal Care (PNC):

- With regard to post natal care, it is satisfying to note that more than 90 percent of the mothers received PNC within 48 hours of delivery of their last child in all the districts, except five viz. Banaskantha, Gandhinagar, Panchmahals, Valsad and Tapi, where only 59-73 percent received PNC by the same time.
- At the state level, about 88 percent of the mothers received PNC within 48 hours of delivery of their last child.
- As part of PNC, more than four-fifths of the newborn babies in most of the districts in the state of Gujarat received check-up within 24 hours of delivery and as a result the corresponding proportion is 89 percent at the state level. This proportion is slightly higher in urban (94 percent) than in rural areas (87 percent).
- As expected, this proportion increases slightly in most of the districts when newborn babies received such check-up within 10 days of birth. At the state level, about 91 percent (95 percent in urban and 89 percent in rural) received check-up within 10 days of birth.
- As regards the source of such maternal health services, about 65-74 percent of women in the state (59-67 percent in urban and 67-77 percent in rural) relied on government sector and 22-24 percent (27-32 percent in urban and 16-20 percent in rural) relied on private sector for seeking ANC, natal and PNC services, while the rest of them (2-13 percent) sought such services at home, mainly through doorstep services available under the public health delivery system.

#### 12) Neo Natal Care:

• As regards awareness of danger signs and symptoms of new- born baby, majority of the respondents in all the districts, except a few like Mehesana, Porbandar, Narmada, Bharuch and Tapi, could recall a number of danger signs and symptoms of newborn.

- About 70-78 percent of the CMW in the state reported about their awareness of danger signs and symptoms of new-born, like baby did not cry, poor sucking of breast, convulsions and breathing problem, while about 55-64 percent also reported knowledge of other signs and symptoms, such as blue tongue and lips, abnormal movement and development of yellow staining of palm and soles.
- As regards the actual practices with regard to newborn care, more than 90 percent of the CMW (with
  youngest child born during three years preceding the survey), in both rural and urban areas in almost
  all the districts, were reported to have taken proper care of their baby soon after the birth, by following
  norm of routine care given to the newborn, such as, cleaning but no bathing, keeping baby warm by
  wrapping and room-in, which are quite encouraging to note.
- About 91-98 percent of the respondents in the state reported to have given above mentioned care to their newborn babies.
- Another important component of newborn care is taking of weight of the newborn at the right time. The
  proportion of children whose birth weight was taken varies from a low of 67-68 percent in
  Surendranagar and Banaskantha to 99 percent in Jamnagar across the districts in the state, indicating
  that on an average 87 percent of the children were weighed after their birth in the state.
- At the state level, 21 percent of the children (18 percent in urban and 22 percent in rural) were reported to have birth weight of less than 2500 gms, which is a cause for concern.

#### 13) Breast Feeding Practices:

- About 90 percent of children below 3 years (born after January 1, 2008) were fed with colostrum after birth for few days and there is a small variation by residence in the state. There is also not much variation across districts with at least 80 percent of children being fed with colostrum in most of the districts in the state, except Sabarkantha, Banaskantha, Patan, Junagadh and Narmada, where 60-79 percent of the children were fed with colostrum.
- The proportion of youngest surviving children who were exclusively breastfed for at least 6 months was 46 percent (51 percent in urban and 44 percent in rural) in the state. However, there is wide variation across the districts from a very low of 10-26 percent in districts like Banaskantha, Sabarkantha and Amreli to 75-83 percent in the district of Kachchh, Junagadh, Porbandar and Surat.
- The supplementation of semi-solid / solid food at the right age has not yet improved substantially in Gujarat. About 60-96 percent of the children were reported to have received food supplementation by the right age in only half of the districts.
- The state also needs to educate women with respect to the proper practice of feeding children with other fluids before age of six months, as 70-91 percent of the children in only one-third of the districts in Gujarat were rightly not given water before age six months, while this proportion is less than 50 percent in 11 districts.
- The state average works out to be only 52 percent, indicating that the remaining 48 percent were given water before age of 6 months.

#### 14) Diarrhea& ARI Management:

- With respect to treatment seeking and management in case of any episode of diarrhea or ARI, it is satisfying to note that out of the 9 percent of children who suffered from diarrhea during two weeks preceding the survey, 96 percent of them received advice/treatments, and 76 percent among them were treated by ORS.
- The treatment seeking is almost same in rural and urban areas, although ORS therapy is slightly more
  in rural than in urban areas in the state.
- The treatment seeking or use of ORS for diarrhea is particularly low in the districts of Jamnagar, Amreli, Junagadh, Porbandar and Banaskantha, where one third of the children or less were treated for diarrhea.
- In Gujarat, 6 percent of children in rural and urban areas suffered from ARI during two weeks preceding the survey.
- About 82 percent of the children, who suffered from ARI, were provided treatment. The treatment seeking for ARI is slightly higher in urban (88 percent) than in rural areas (79 percent).
- In fact, 69-100 percent of the children who suffered from ARI, received medical treatment in most of the districts, except Banaskantha and Patan where only 43-52 percent received medical treatment.

#### 15) Immunization & Vitamin A:

- As regards the status of immunization card, majority of the children aged 12-23 months in most of the
  districts in Gujarat is provided with an immunization card, as reported by their mothers, although a
  large proportion of them could not produce it for verification of record of various immunizations, which
  is particularly high in certain districts like Ahmedabad, Patan, Jamnagar, Amreli and Panchmahals
  (40-68 percent).
- The main defaulter districts, with respect to possession of no immunization card (in case of 15-32 percent of children), are Banaskantha, Patan, Porbandar and Valsad, while the corresponding proportion in other districts is low and varies from 1-11 percent.
- At the state level, about 67 percent do hold an immunization card and another 25 percent do have but could not produce it for verification of immunization records, while the remaining 8 percent do not have any such card.
- A little over two-thirds of children (69 percent) aged 12-23 months received full immunization comprising BCG, three doses of DPT, three doses of polio and measles.
- About 75 percent of the children in urban areas had received all the recommended vaccinations by the time of the survey, compared with 67 percent in rural areas.
- There is a wide variation in full immunization rate across the districts in Gujarat from a low of 35-38 percent in Panchmahals and The Dangs to 94 percent in Mehsana.
- Coverage of each vaccination is much higher than the percentage fully vaccinated, although coverage
  of each vaccination is not yet cent percent in most of the districts in the state. It is particularly true in
  case of measles vaccine where coverage is less than 75 percent in case of about one-third of the
  districts. In fact, the relatively lower percentages of fully vaccinated in certain districts can largely be
  attributed to lower coverage of measles in those districts.

- The coverage with respect to Vitamin A supplementation is also much less in most of the districts in the state. For example, proportion of children age 9-35 months who received at least one dose of vitamin A is only about 65 percent in the state, although it varies from a low of 42 percent in Banaskantha to 88 percent in Vadodara.
- The proportion of children who received 3 or more doses of vitamin A reduces to 34 percent at the state level. The coverage with respect to each vaccination and vitamin A supplementation is slightly higher in urban than in rural areas of the state.

#### 16) Family Planning:

- The data on current contraceptive use among the currently married women reveal that 62 percent are using any family planning method in the state of Gujarat.
- The use of any modern method is slightly lower (61 percent) than any method, indicating that use of any traditional method is very small in the state.
- Oral pills and IUD are being used by only 3.3 and 3.0 percent of CMW respectively.
- Female sterilization is predominant among the contraceptive methods, it being used by 49 percent of CMW aged 15-49 years, while acceptance of male sterilization is very small (1 percent) in the state.
- The use of popular male oriented spacing or temporary methods like condom is reported by only 4
  percent of the CMW.
- The rural-urban differentials in the use of any method are not very large, although use of any method is slightly higher in urban (67 percent) than in rural areas (60 percent) in Gujarat.
- The current use of contraception is highest in Tapi (76 percent), followed by Porbandar and Vadodara (74 percent each) and Amreli, Navsari and Jamnagar (71- 72 percent), while it is lowest in the district of Dahod (46 percent).
- The current use of female sterilization ranges from 30 percent in The Dangs district to 61 percent in Navsari. The use of male sterilization is less than 3 percent in most of the districts, except The Dangs and Tapi where its current use is 11-13 percent.
- The variation in contraceptive prevalence at district level is basically due to the variation in the use of permanent methods.

#### 17) Vital Statistic:

The ultimate impact of the MCH and Family Planning Programme at the district and state level can best be judged from its current level of fertility and mortality, particularly infant, child and maternal mortality.

#### 17a) Crude Birth Rate:

 Based on estimates for the three year period before DLRHS (2008-10), the crude birth rate (CBR) was about 22.5 births per 1000 population in the state of Gujarat (for mid-year 2009).

- Incidentally, this estimate is quite close to SRS estimate of 22.3 for Gujarat during 2009. The level of CBR varies from a very high of 32.7 births per 1000 population in The Dangs district, followed by 30.6 in Dahod, to as low as 15.5 in Navsari district.
- Most of the tribal districts and Kachchh have a CBR of about 25 or more, while the remaining twothirds of the districts are either close to the state average or below the state average in terms of their level of fertility.

#### 17b) Crude Death Rate:

- Based on estimates for the three year period before DLRHS, the crude death rate (CDR) was 6.6 deaths per 1000 population in the state of Gujarat (during 2009). This estimate is slightly lower than SRS estimate of 6.9 for the corresponding period.
- The level of CDR varies from a high of 9.4 deaths per 1000 population in Dahod, followed by a level of 8.7-8.8 in Banaskantha and The Dangs, to a level of 5.0 in Navsari district. Here again, most of the tribal districts and two other districts viz. Kachchh and Surendranagar, have relatively higher level of mortality than most of the other districts in the state.

#### 17c) Infant Mortality Rate:

- According to the present DLRHS estimate, infant mortality in Gujarat was about 48 deaths per 1000 live births for the year 2008, it being mid-year of the period 2006-10.
- This DLRHS based estimate is slightly lower than the SRS estimate of 50 deaths per 1000 live births
  for the year 2008. It is however important to note that there is a large variation in IMR across the
  districts in the state of Gujarat, as it varies from a low of 32 deaths per 1000 live births in Anand to as
  high as 63 in Dahod.
- In fact, it is once again disturbing to note that most of the tribal districts and Kachchh are also found to have relatively higher level of infant mortality (51 or more), compared to other districts in the state.

#### 17d) Under Five Mortality:

- The under-five mortality in Gujarat was 61 deaths per 1000 live births for the year 2008 (period 2006-10).
- This DLRHS based estimate is quite close to SRS estimate of 60 deaths per 1000 live births for the corresponding period.
- Like the pattern observed in the case of IMR, there is a large variation in under five mortality across the districts in the state of Gujarat as it varies from a low level of 39 deaths per 1000 live births in Anand to as high as 85 deaths per 1000 live births in Dahod.
- As noted earlier in case of IMR, the level of child mortality is also higher than the state average of 61 deaths per 1,000 live births in case of most of the tribal districts except Tapi; as well as in case of Kachchh and Surendranagar.
- It is also important to note the leading districts in the state. In this regard, it may be noted that the five districts viz., Anand, Navsari, surat, Rajkot and Ahmedabad, which are noted to have least level of

- IMR, have also done well in reducing child mortality to the level of 50 or less number of deaths per 1.000 live births.
- Most of the other districts which have relatively lower level of child mortality than the State average
  are yet to reach at least to the level reached by the leading districts, while the most laggard districts
  are those which are tribal dominated and those which mainly fall under Kachchh and Saurashtra
  region.

#### 17e) Maternal Mortality Rate:

An attempt has also been made under the present DLRHS, to provide an estimate of MMR at the state level for the three-year period preceding the survey, although the samples selected for each of the districts in the state are not large enough to provide an estimate at the district level.

- The average maternal mortality ratio at the state level for the three-year period preceding the survey is 142 deaths per 100,000 live births. The approximate 95 percent confidence interval (CI), for the present estimate of MMR ranges from 101 to 183 per 100,000 live births. The present estimate corresponds to the period 2008-10.
- The corresponding SRS estimate for the period 2007-09 was 148 (95%CI: 100-196) deaths per 100,000 live births for the state of Gujarat. Thus, as expected, our present estimate (2008-10) is slightly lower than the SRS estimate (2007-09) due to the slight difference in the reference period.
- It is important to note that there is considerable overlap in the confidence intervals of the estimates from the two surveys (SRS and the present DLRHS), indicating that the difference between the above two estimates of MMR is not significant statistically.

# Office of the Director of Fisheries Vikas Bhavan, Thiruvnathanpuram, Kerala

The Central sector scheme 'Strengthening of data base and information net working in fisheries sector' includes two sample surveys-inland catch assessment survey and Marine catch Assessment survey. These surveys are continuing for the 12<sup>th</sup> Plan also.

Inland catch Assessment survey	
Year and month of installation	Continuing
Year/month of installation ( if completed)	
Name of executive Office/Organization	District offices of Fisheries
Name of Survey	Inland catch Assessment survey
Subject and nature of the survey	Sample survey for the estimation of inland fish
	landings
Contact details of the office along with e-mail ID	
Information of the survey with objectives	The objective of the survey is to estimate the inland fishery resources and inland fish landings. The methodology followed is that of CIFRI. For the purpose of the survey the entire water bodies are divided into three groups-Group1-water bodies up to 10ha area at full tank level- Group 2. Water bodies above 10 ha area at full tank storage level and group 3-rivers, canalsesturaries, lagoons, and backwaters.
Coverage	All the inland water bodies are covered for the surveys
Sampling design	Stratified random methodology is followed. Since the productivity varies from type to type of water bodies, separate sampling methodologies are followed.
Field work	The staff of fisheries Department in inland sector are collecting the details as per methodology
Major Findings	

Marine catch Assessment survey	
Year/month of installation (if completed)	
Name of executive Office/Organisation	District offices of Fisheries
Name of the survey	Marine catch Assessment survey
Subject and nature of the survey	Sample survey for the estimation of marine fish
	landings
Contact details of the office along with e-mail ID	
Information of the survey with objectives	The objective of the survey is to estimate the marine
	fish landings. The methodology followed is that of
	CMFRI.
Coverage	Fish landing details from landing centres of the
	marine Districts are collected
Sampling design	Stratified random methodology is followed
Field work	The staff of fisheries Department are collecting the
	details as per methodology
Data Processing	Data processing is done with the help of the
	software developed by CMFRI.
Major Findings	

# Office of the Labour Commissioner, Thiruvananthapuram , Kerala

Information Related to the Working Class Family Budget Survey 2011-12

1. Year/Month of initiation

The Working Class Family Budget Survey was started Statewide on 1st February 2011.

2. Year/Mont of Completion

The first phase, i.e., field work of the survey has been completed on 31st January 2012. The second phases of the (data entry) has been completed on October 2012. The work relating to the report generation of the survey is in progress.

3. Name of the Executing office/organization

Department of Economics & Statistics, Govt. of Kerala

4. Name of the Survey:

Working class Family Budget Survey 2011-12.

5. Subject and Nature of the Survey

Consumer expenditure-consumption pattern among the industrial workers and agicultural labourers will be collected during the survey. Based on these data, the weighting diagram required for the revision of consumer price index numbers will be prepared. Usually, the survey is conducted once in 10 years.

6. Contact details of the office along with e-mail id

The Director

Directorate of Economics & Statistics

Vikasbhavan P.O

Ph. No 0471-2308318

Fax no. 0471-2305317

E mail id: ecostatdir@gmail.com/ecostatbs@gmail.com

Detailed Information on the Working Class Family Budget Survey2011-12

1. Introduction of the Survey with Objectives: The present base year being followed for the computation of Consumer Price Index is 1998-99. Over the last twelve years, considerable changes have been effected as regards to consumption pattern, purchasing capacity etc. of the industrial workers and agricultural labourers. Hence, updation of the base year- for which conduct of a fresh family Budget Survey is inevitable – is suggested. The Department of Economic & Statistics, Govt. of Kerala is entrusted with the computation of the Working Class consumer price Index.

#### 2. Coverage of the Survey

The working class family budget survey 2011-12 has covered the following 15 sectors:

1. Agricultural sector – Agricultural services, Farming of animals, Fishing hunting etc.

- 2. Mining and Quarrying
- 3. Manufacturing
- 4. Electricity, Gas and Water supply.
- 5. Construction
- 6. Wholesale and Retail Trade sales, Maintenance and Repair of Motor Vehicles 'Motor cars and personal/Household goods
- 7. Hotels, Restaurants and Shops etc.
- 8. Transport, Storage, Posts & Telecommunication
- 9. Financial Intermediation
- 10. Real estate Banking and Business Services
- 11. Public Administration, Defence and social security
- 12. Education
- 13. Health and social services
- 14. Other community and personal services
- 15. Other activities

The survey has been conducted in the following 17 centres in the following state.

- 1. Thiruvananthapuam-Major
- 2. Kokkam-Major
- 3. Punalur
- 4. Alappuzha-Major
- 5. Kottayam
- 6. Mundakkayam
- 7. Idukki
- 8. Ernakulam-Major
- 9. Chalakkudy
- 10. Thrissur
- 11. Palakkad
- 12. Malappuram
- 13. Kozihikode-Major
- 14. Wayanad
- 15. Kannur
- 16. Pathanamthitta
- 17. Kasakgode

#### 3. Sampling Design

A stratified random sampling design was followed for conducting the Working Class Family Budget Survey. The required number of workers was selected by systematic sampling from the list of particular category or industry.

The method of pay roll sampling was adopted for the selection of workers and their families. The sample size for industrial workers was fixed as 600 each for the major centres and 300 each for the minor centres. In addition to these 120 samples each from the major centres were also collected, in order to ensure the representation of agricultural labourers. A stratified sampling design was adopted for the survey. The total workers were classified in to the three income groups

Low Income Group Up to Rs.4000/- p.m.

Medium Income Group Rs.4000/- to Rs.7000/High Income Group Rs. 7000/- & above p.m.

The required number of sample workers were selected from that group by circular Systematic Random sampling methods. These sample workers were contacted in their house and the detail were collected by the investigators by personal interview.

- 4. Having completed the preliminary works such as listing of industries, copying of pay roll etc. the field enumeration of the survey was started on 1stfeb 2011 and ended on January 2012.
- 5. Data processing: Data entry work of the filled up schedule has been completed byOct.2012. The processing of the data is in progress.

## Govt. of Maharashtra-Forest Resources Survey Scheme- (2009 to 2011)

The "Forest Resources Survey Scheme" is mainly aimed at estimating the existing growing stock, so that precise treatment could be designed to enhance the quality of forests while revising / preparing the Working Plan. This scheme is implemented in three phases viz. A) Planning of surveys and training the field staff for collection and compilation of field data, by adopting accurate Probability Sampling Method B) Actual enumeration, collection and compilation of data i.e. sample plot wise/species wise/girth class wise number of trees and last but not least C) The analysis of such collected data, to decide working circle-wise number of trees and estimated volume per hectare and Girth class wise as well as Species wise composition.

# A) Planning of surveys and training the field staff for collection and compilation of field data, by adopting accurate Probability Sampling Method

Planning of surveys and training to the field staff for collection and compilation of field data, by adopting accurate Probability Sampling Method is used. Success of any sampling process depends on choice of accurate Probability Sampling Method, so that its implementation is feasible and cost effective also non sampling error - enumerators bias is avoided. Following sampling designs are suitable in this regard.

- i) Stratified Random Sampling by Topo-graphical units.
- ii) Systematic Strip Sampling
- iii) Line Plot Survey adopted for Bamboo Survey
- iv) Line Plot Surveys using density maps based on Satellite imagery.
- v) Systematic Line Plot Sampling Technique With a Random Start

#### **SAMPLING DESIGN:**

The Systematic Line Plot Sampling Technique with a Random Start as mentioned at Sr. no. V above, is found to be economical, feasible and result oriented as far as prediction of Population pattern is concerned. This design is used for enumeration and analysis of sampled data in forest divisions of Maharashtra State .In this method, training of field staff is mostly devoted to laying of sampling design on available Toposheets / Maps and demonstration of actual enumeration in sample plots of 60X60 meter size in one hector in each Forest Range. The laying of sample design depends on the scale of Toposheets / Maps. Following are some conversion factors being used for various scales of Toposheets / Maps

Sr.	Scale of Toposheet	Actual size of square on	Actual distance between two
No.		Toposheet	sample plot in the field
			(Aprox.)
1	8" = 1 mile	3" x 3"	600 meters
2	4" = 1 mile	1.5" x 1.5"	,,
3	2" = 1 mile	0.75" x 0.75"	,,
4	1" = 1 mile	0.375" x 0.375"	,,

(N.B.—For the maps having scales other than above mentioned scale, dimensions proportional to above conversion factors are calculated accordingly.)

Considering the fact that the intensity of sampling should be at least 1% to 2% of the total population area to have accurate estimation, the number of sample plots are decided and actual enumeration work of such decided sample plots is carried out accordingly. The survey work of Forest Resources Survey Scheme is carried out under the overall administrative and technical control of the Additional Chief Conservator of Forests, Working Plans Nagpur and Pune.

# B) Actual enumeration, collection and compilation of data i.e. sample plot-wise/species-wise/girth class-wise number of trees

This task of actual enumeration work for the forest divisions of Vidarbha region is entrusted to the concerned field staff under the supervision of Additional Chief Conservator of Forests, Working Plan, Nagpur and Chief Conservator of Forests, of the concerned Working Plan, divisions. For the forest divisions, other than Vidarbha region, enumeration works are monitored by the Sub Divisional Forest Officer, Forest Resources Survey Unit, Nashik under the supervision of Additional Chief Conservator of Forests, Working Plan, Pune and Chief Conservator of Forests, Working Plan, Nashik.

Field work: The statistical work is entrusted to the Chief Forest Statistician Who works under the control of Additional Principal Conservator of Forests (Information, Technology & Policy) in the Forest Department of Maharashtra State. The Forest Statistician is assisted by Assistant Forest Statistician and Senior and Junior statistical assistant. The field staff comprises of Sub- Divisional Forest Officers, Range Forest Officers, Foresters, Forest Guards, Surveyors and Labourers, working under the control and supervision of respective territorial Forest Division and Working plans divisions. The demonstration of such sampling designs are given by Chief Forest Statistician, Maharashtra State, Nagpur on the field site. Thus the information is collected at concerned forest division level / forest sub-division level and the same is submitted to concerning Forest Resources Survey unit and then compiled report of tree enumeration work of the respective division is furnished to the office of the Chief Forest Statistician, Maharashtra State, Nagpur for further Statistical analysis and interpretation.

#### • Data processing:

# C) The analysis of data, to decide working circle-wise number of trees per hectare & estimated volume per hectare and Girth class-wise as well as Species-wise composition.

The data thus received from the concerned offices is scrutinized in the office of the Chief Forest Statistician, Maharashtra State, Nagpur and Sample plot-wise / species-wise data entry is done. After completion of data entry, the results in following statement I to IV are generated and statement - V of estimated volume (cu. m.) per Ha. is calculated with respective division's latest form factor.

**Statement I** :-- Estimated Growing Stock: Total No. of sound trees Sample

**Statement II** :-- Estimated Growing Stock: No. of sound trees per hector

Statement III :-- Percentage distribution of total stock of a species over all girth classes

**Statement IV** :-- Percentage of total stock of a species in a girth class to the total stock in that particular girth class

**Statement V**:-- Estimated Growing Stock: Volume in cubic meter per ha.

#### **Major Findings:**

All these statements are tabulated species wise and girth-class wise, to have idea of composition of forest cover in entire population area. As the results are based on sampling design, they are subjected to certain errors. The Standard error for each working circle is calculated and intimated to the concerned divisions. Apart from this, considering the latest Volume Conversion Factors prepared for the division in question or similar areas, estimated volume per hector is calculated and intimated. This information is added in new working plan & sanction is taken by Government of India for further Management, Silvi-cultural implementing activities. Finally, the analytical report of tree enumeration works by using sampling techniques is prepared by the Statistical cell at state level. Such analytical report is then sent to the concerned forest territorial division and working plan division for their information and further use in the preparation/ revision of new working plan.

Information regarding Sample Survey of tree enumeration work for various forest divisions conducted in Maharashtra during the year 2009-10,2010-11,2011-12:

#### 1.CENTRAL CHANDA DIVISION

1. Year/month of initiation : April 2010

2. Year/month of completion( if completed) : January 2011

3. Name of the Executing office/organization : Additional Principal Chief Conservator of

Forests (Working Plan) East Nagpur.

4. Name of the survey : Tree Enumeration

5. **Subject & Nature of the survey** : Tree Enumeration by " Systematic Line

Plot Sampling Technique With a Random Start."

6. **Contact details of the office along with e-mail id**: Additional Principal Chief Conservator of Forests (Information, Technology & Policy) Nagpur. Ph. No. Off: 0712-25556 e-mail-apccfitp@mahaforest.gov.in

#### 2.NANDED DIVISION

1. Year/month of initiation : 2010

2. Year/month of completion(if completed) : 2011

3. **Name of the Executing office/organization**: Additional Principal Chief of Conservator Forests (Working Plan) West Pune

**4. Name of the survey**: Tree Enumeration

5. **Subject & Nature of the survey**: Tree Enumeration by "Systematic Line Plot Sampling Technique With a Random Start"

6. **Contact details of the office along with e-mail id**: Additional Principal Chief Conservator of Forests (Information, Technology & Policy), Nagpur. Ph. No. Off: 0712-255567, e-mail-apccfitp@mahaforest.gov.in

#### 3.SANGLI DIVISION

1. Year/month of initiation : 2010

2. Year/month of completion( if completed) : 2011

3. Name of the Executing office/organization: Additional Principal Chief Of Conservator

Forests (Working Plan) West Pune.

4. Name of the survey : Tree Enumeration

5. **Subject & Nature of the survey** :Tree Enumeration by "Systematic Line Plot Sampling Technique With a Random Start."

6. **Contact details of the office along with e-mail id** : Additional Principal Chief Conservator of Forests (Information, Technology & Policy) Nagpur. Ph. No. Off: 0712-2555671 e-mail-apccfitp@mahaforest.gov.in

#### **4.CHIPLUN DIVISION**

1. **Year/month of initiation** : February 2010

2. Year/month of completion( if completed) : March 2011

3. Name of the Executing office/organization : Additional Principal Chief of Conservator

Forests (Working Plan) West Pune

: Additional Principal Chief Conservator of

4. Name of the survey : Tree Enumeration

5. **Subject & Nature of the survey** :Tree Enumeration by "Systematic line Plot

Sampling Technique with a Random Start"

6. Contact details of the office along with e-mail id

Forests (Information, Technology & Policy) Nagpur. Ph. No. Off: 0712-255567,e-mail-

apccfitp@mahaforest.gov.in

#### **5.EAST NASHIK DIVISION**

1. Year/month of initiation : 2009

2. Year/month of completion( if completed) : 2010

3. Name of the Executing office/organization : Additional Principal Chief Of

ConservatorForests (Working Plan) West

Pune.

4. Name of the survey : Tree Enumeration

5. Subject & Nature of the survey Sampling Technique with a Random Start."	: Tree Enumeration	by "Systematic Line Plot
6. Contact details of the office along with e-mail id (Information, Technology & Policy) Nagpur. Ph.No. Off:		

# Directorate of Veterinary & Animal Husbandry- Govt. of Nagaland Information on sample surveys

1. Year/Month of initiation : Monsoon Season - March

Rainy - July

Winter - November

2. Year/Month of completion : Monsoon Season - June

Rainy - October Winter - February

3. Name of the Executing Office/Organization: Directorate of Veterinary & A.H.(Statistical Branch) Nagaland, Kohima.

4. Name of Survey : Integrated Sample Survey

5. Subject & Nature of Survey : Survey for estimate of Livestock Products viz.

Milk, Egg & Meat in the State.

6. Contact detail of the Office along with e-mail : Directorate of Veterinary & A.H.Nagaland, Kohima. Pin

No. 797001 e-mail: vetstat@yahoo.in

**Introduction of the Survey with objectives:** The main object of the survey is to estimate the District and State Level production of major livestock viz, milk, egg & meat annually and to provide reliable data for the development of A.H. & Dairying Sector.

**Coverage:** Survey covers all the 11 (eleven) Districts of Nagaland.

**Sampling Design:** The sample design adopted was three stages stratified random sampling as prescribed by the Ministry of Agriculture, Deptt. of A.H. & Dairying.

**Field Work**: Covering all Districts with 15 % sample size of the total villages which are equally distributed among the three seasons for complete enumeration.

**Data processing:** After collection of data from selected villages the reports are being compiled at the state level in the Directorate of Veterinary & A.H. and send the final report to the Govt. of India.

Major findings: State Level production of Milk, Egg & Meat

## **Directorate of Economics & Statistics, Odisha**

#### 1. Establishment of an Agency for Reporting Agricultural Statistics (EARAS):

1	Year / month of information	:	1976-77 and continuing
2	Year / month of completion	:	Survey is conducted during each agricultural year
	(if completed)		
3	Name of the Executive Office / Organization	:	Director, Economics & Statistics, Odisha, Bhubaneswar
4	Name of the Survey	:	Establishment of an Agency for Reporting Agricultural Statistics (EARAS)
5	Subject & Nature of the Survey	:	Collection of agricultural data through sample surveys, formulation of different estimates.
6	Contact details of the office along with e-mail id	:	Director, Economics & Statistics, Heads of the Department Building (4th Floor), Bhubaneswar, Odisha, Pin:- 751001, Tel. No 0674-2391295, E-mail id:- desbbsr@dataone.in/ desbbsr@gmail.com

**Introduction of the Survey:-**The scheme Establishment of an Agency for Reporting Agricultural Statistics (EARAS) was sponsored by Government of India in Ministry of Agriculture and it came in to force in our State with effect from the agriculture year 1976-77. Since then the scheme is in operation in the State. The scheme was funded by Central Government & State government on 50:50 basis till 2006-07. The scheme has been treated as a Central Plan scheme with 100% Central Assistance w.e.f. 2007-08.

**Objectives:-** i) Formulation of estimates of area, yield rate & production of paddy at block, district and state level and that of 13 important minor crops viz., Wheat, Maize, Ragi, Mung, Biri, Kulthi, Til, Groundnut, Mustard, Niger (included w.e.f. 2002-03), Jute, Potato and Sugarcane at district and State level.

- ii) Formulation of estimates of area under various types of land uses at block district and state level.
- iii) Formulation of 4 advance estimates of area, yield rate & production of programmed crops prior to release of final estimates.
- iv) Formulation of estimates of cropped area irrigated (both crop wise & source wise).
- v) Formulation of estimates of area & yield rate of Paddy, Wheat & Maize separately for High yielding & Local varieties.
- vi) Formulation of estimates of yield rate of different crops separately for irrigated & un-irrigated conditions (for paddy at district & 12 important minor crops at State level).

- vii) Formulation of estimates of yield rate of different crops separately from different types of soil (for paddy at district & minor crops at State level).
- viii) Formulation of estimates of yield rate of different crops separately with application of fertilizer & non-application of fertilizer (for paddy at district & minor crops at State level).

**Coverage:** i)For the purpose of formulation of estimates, Paddy and 12 minor crops i.e. Wheat, Maize, Ragi, Mung (Greengram), Biri (Blackgram), Kulthi (Horsegram), Til, Groundnut, Mustard, Jute, Potato and Sugarcane were covered as programmed crops till 2001-02.

ii) As per suggestions of State Government, Niger crop has been included under the programmed minor crops w.e.f. the agricultural year 2002-03. But estimates in respect of this crop have not been accepted by State Government as official estimate.

#### Sampling Design:-

**Sample Size -** Initially, the sample size was 6% (1976-77) and increased (1977-78-10%, 1978-79 & 1979-80 - 10%) to 20% in phases w.e.f. the agricultural year 1981-82 with a view to cover all revenue villages of the state within a period of 5 years i.e. one round of survey.

**Sampling Unit-** For selection of sample villages, each CD block of the state is taken as a stratum or unit.

**Frame for the survey-** i) All revenue villages of all CD blocks constitute the frame for district for sample surveys under the scheme.

ii) The areas covered under irrigation projects, submerged under sea/ river/lakes, transferred to developmental projects, transferred to Forest Department are excluded from the frame.

**Sample selection** – From each stratum (CD block), 5 sets of samples each constituting 20% of revenue villages is drawn by the method of Simple Random Sampling without replacement with a view to cover one set during each agricultural year.

**Field Work:-**Field operation consists of two phases.

#### i) Land Utilization Survey

- a) Land utilization/ Area enumeration is done by visiting each survey No./ Plot of each sample village with the help of maps & R.O. Rs during each crop season (Autumn, Winter and Summer) of an agricultural year in order to collect primary data on area under different crops and other types of land uses pertaining to the same agricultural year.
- b) In case of un-surveyed villages for which maps and R.O. Rs are not available, area enumerations is conducted on the basis of households along with their particulars on land possessed/ land cultivated.

#### ii) Yield Estimation Survey

a) Under Yield Estimation Survey, crop cutting experiments on paddy and 13 minor crops i.e. wheat, maize, ragi, mung, biri, kulthi, til, groundnut, mustard, niger, jute, potato and sugarcane are conducted.

- b) As regards crop cutting experiments, 2 4 experiments are conducted on paddy in each sample village selected for yield estimation in each season. For minor crops, one crop cutting experiment is conducted during 3 crop seasons in each village selected for yield estimation according to its availability.
- c) A stratified three stage Random Sampling Design is adopted for yield estimation survey taking Block as the stratum, sample village as the 1st stage sampling unit, selected survey number/ plot as the 2nd and experimental field of size 5mts.x 5mts. as 3rd stage of the sampling units respectively.

**First Stage:** For yield estimation survey, a sub sample of 40% and 50% villages is selected out of total number of sample villages for crop cutting experiments on paddy and minor crops respectively. But, during summer season, slight deviation is adopted due to inadequate cultivation of crops. Thus, all sample villages are taken for conducting crop cutting experiments in summer season.

#### **Second Stage:**

- a) For the purpose of selecting plot/ plots for conducting c.c. experiment in cadastral surveyed villages a list of plots/ survey numbers growing crops is prepared separately for each programmed crop. In case of unsurveyed villages, the list of households cultivating the crop is prepared separately for each crop.
- b) From the above list, numbers of plot/ plots are selected according to plan/target by Simple Random Sampling method for conducting crop cutting experiments on different crops.

#### Third Stage:

In the selected plot/plots an experimental field of size 5mts.x 5mts. is randomly identified with the help of a pair of imaginary co-ordinates for conducting c.c experiments on all programmed crops (except potato) and weight of the harvested produce obtained from the experimental field is considered for yield estimation. In case of potato crop, the experimental field forms the shape of a trapezium of size 5mts. Height and 8 rows in length.

#### **Data Processing**

- i) Data entry is done at district headquarters /at DES headquarters where it is not done at district headquarters.
- ii) Data processing & formulation of estimates are done at DES headquarters.

#### **Major Findings**

Wide variation has been observed between the estimates of area under different crops (specifically pulses & oilseeds) EARAS and that reported by the Director of Agriculture &Food Production, Odisha. It is not becoming possible to reconcile the data since the methodology adopted for collection of agricultural data by both the agencies is different.

#### 2. Quick Sample Survey on Financial Inclusion:

Year / month of information	:	2011-12
Year / month of completion  (if completed)	:	NA
(ii completed)		
Name of the Executive Office /	:	Director, Economics & Statistics, Odisha, Bhubaneswar
Organization		
Name of the Survey	:	Quick Sample Survey on Financial Inclusion
Subject & Nature of the Survey	:	Household Survey
Contact details of the office along with e-	:	Director, Economics & Statistics, Heads of the
mail id		Department Building (4th Floor), Bhubaneswar, Odisha,
		Pin:- 751001, Tel. No 0674-2391295, E-mail id:-
		desbbsr@dataone.in/ desbbsr@gmail.com
	Year / month of completion  (if completed)  Name of the Executive Office / Organization  Name of the Survey  Subject & Nature of the Survey  Contact details of the office along with e-	Year / month of completion :  (if completed)  Name of the Executive Office / : Organization  Name of the Survey :  Subject & Nature of the Survey :  Contact details of the office along with e- :

**Introduction of the Survey with objectives:-** To ascertain, whether Financial Inclusion has been achieved in all Districts of Odisha except Malkangiri. A quick Sample Survey on Financial Inclusion in 3 (three) Districts shall be concluded.

Coverage:-One district from each Revenue Division was selected i.e. Balasore, Bargarh&Koraput.

**Sample Design:**- A Stratified Random Sampling design was adopted for the survey. The sample units are 2001 Census villages for rural sector and urban frame survey (UFS) blocks for Urban Sector.

**Note:** As the information sought for the Financial Year 2011-12, other information could not be supplied as the field work completed during May 2012 i.e. in FY 2012-13.]

## 3: Agriculture Census:

1.	Year and Moth of initiation:-	1970-71
2.	Year and Moth of Completion ( If completed):-	Conducted quinquennially, 8th Agriculture Census 2005-06 in series has been completed and 9th Census 2010-11 with reference year 2010-11 is under progress
3.	Name of the Executive officer/ Organization	Director, Economics & Statistics and Agriculture Census Commissioner / Development Commissioner Cum Additional Chief Secretary and

		Principal Agricultural Census Commissioner
4.	Name of the Survey	Agriculture Census
5.	Subject and Nature of Survey	Collection and maintenance of data on operational holdings and other related agricultural infrastructure, live-stock, credit and soil health status through quinquennial Agricultural Census.
6.	Contact details of the office along with e-mail id	Director, Economics & Statistics  Heads of Department Building 4 <sup>th</sup> floor, BBSR, Odisha, Pin 751001.  Tel-0674-2391295/ E.mail:-desbbsr@gmail.com/ jdagcensus@yahoo.com

#### Introduction of the Survey with objective:

The Agricultural Census is conducted to meet the information needs for planning of the development of agriculture in Odisha with the support of Ministry of Agriculture, Government of India. This Census has been conducted at five yearly intervals, commencing from 1970-71. The Census is followed by an Input Survey. (So far, this State has completed eight Agricultural Censuses up to 2005-06. The results of the eight Agricultural Census (Phase-I&II)with reference year 2005-06 have been finalized, followed by an Input Survey with reference year 2006-07 (July'2006 to June'2007), which has been completed. The 9th Agricultural Census 2010-11(Phase-I) with reference year 2010-11 have completed and report is finalized at Regional meeting at Kolkata but final clearance is yet to be received from GOI. Phase-II survey is under progress.

**Coverage:** The whole project of Agricultural Census consists of three phases of survey. The Phase-I survey constitutes listing of operational holdings and operated area covering 20% sample village of the state and the Phase-II survey covers details of land holdings like tenancy, land utilization, irrigation, cropping pattern & dispersal of holdings according to different size groups/social groups covering above 20% sample villages.

The Phase-III i.e. Input survey which collects data from 35% sample villages out of 20% sample villages selected in phase-I on consumption of various agricultural inputs like use of fertilizers, manures, pesticides, agricultural machinery and equipment, livestock and agricultural credit, according to major size-groups of operational holdings, viz., Marginal (below 1 ha.), Small (1- 1.99 ha.), Semi-medium (2-3.99 ha.), Medium (4 - 9.99 ha.) And large (10 ha. and above), for getting an insight into the consumption pattern of inputs by various categories of farmers.

**Sample Design:** The sampling design adopted for the Agricultural Census is a two stage stratified sampling with village as first stage unit taking block as stratum and operational holdings as the second stage unit. 20% of sample villages selected through Simple Random Sampling Method (without replacement) under the

EARAS Scheme were used for collection of data under Agricultural Census Scheme. Thus, around 10,400 villages were selected for 9<sup>th</sup> Agricultural Census 2010-11. For collection of detailed information from the operational holdings (second stage unit) all the operational holdings were classified into 10 size classes based on extent of operated area under three social groups i.e. SC, ST and Others in related schedules. From each size class, 25% of the total holdings have been selected on circular systematic sampling basis except for 9th and 10th size classes where all the holdings were selected for canvasing of the schedules in phase-II. The size classes are below 0.5ha, 0.5-1.00ha, 1.00-2.00ha, 2.00-3.00ha, 3.00-4.00ha, 4.00-5.00ha, 5.00-7.50ha, 7.50-10.00ha, 10.00-20.00ha, 20.00ha and above. But no selection is made for institutional holdings.

The Phase-III i.e. Input survey The sample design adopted for the survey was a two stage stratified sample design with village as 1<sup>st</sup> stage unit with Block as stratum and operational holdings as the 2<sup>nd</sup> stage unit. The sample size of the 1<sup>st</sup> stage unit was 35% of 20% Agricultural villages. Selection of villages is done by Simple Random Sampling Method (without replacement) from out of selected villages of agricultural census 2010-11. From each of 5 size classes, 4Nos of OHs are selected for collection of data during Input survey. In any size group there is 4 or less than 4 operational holding may be selected for survey.

**Field work**: The collection of information was done by the statistical field surveyors of the Directorate of Economics & Statistics. After selection of operational holdings, information was collected from selected operational holders, by the interview method visiting the selected households during the period of the survey and recorded in the prescribed schedules. The supervision was done by the senior statistical field Inspectors and statistical field Inspectors at block level. The District Statistical Officers / Deputy Directors (Statistics) Ranges have also supervised the work. The officers from the State headquarters have also made field visits and monitored the Agricultural Census work.

**Data processing:** After completion of survey, the filled-in schedules were scrutinized to correct the errors and data entry work was done at Directorate level under the technical guidance of RCC, Kolkata as appointed by the Government of India and National Informatics Centre (NIC). New Delhi. The computerized data were subsequently validated and sent to the RCC Kolkata for estimation and generation of tables / results for the state according to tabulation plan of the Government of India.

#### **Major Findings:**

- The number of operational holdings has increased from 34.07 lakh in 1970-71 to 43.56 lakh in 2005-06, which may be attributed to division of joint family system.
- The total operated area of 64.49 lakh ha in 1970-71 has reduced to 57.31 in 1976-77, a decrease about 12.51%. It drops further by 8.60% between 1976-77 and 1980-81. However, in subsequent census periods, the operated area observes a declining trend with slow pace except in 1990-91. The average growth in number of holdings is estimated at 3.42, but in case of area, it registers a negative growth of 3.74.
- According to Input Survey, 2006-07, the total number of operational holdings in the state was 43.55lakh against the operated area of 48.97lakh ha. The distribution of holdings among size groups was 25.97 lakh for marginal, 11.56 lakh for small,4.72 lakh for semi-med, 1.19 lakh for medium & 0.11lakh for large holdings against operated area of 13.33 lakh ha,15.63 lakh ha, 12.19 lakh ha, 6.38 lakh ha, 1.44 lakh ha respectively.

- The total number of parcels (chakas) is estimated to be 102.98lakh in the state compared to 106.57 lakh in 1996-97. The estimated shares of size classes- Marginal, Small, Semi-Medium, Medium & Large are 47.23%, 31.53%, 15.92%, 4.87% &0.48% respectively.
- The average no of parcels per holding in the state works out to 2.36 against 2.70 in 1996-97. The average area per parcel is estimated to be 0.48 ha as against 0.46 ha in 1996-97.
- According to Input Survey, 2006-07, the total number of operational holdings in the state was 43.55lakh against the operated area of 48.97lakh ha. Against the net irrigated area of 10.91 lakh ha, the percentage of cropped once was 47.63%, while area cropped twice was 51.39%. However the percentage of area cropped more than twice was as low as 0.98%. Similarly against 35.52 lakh ha unirrigated area, the area cropped once constituted 88.40%, whereas the remaining 11.60% belonged to area cropped more than once.
- About 88% of the irrigated area to the total gross irrigated area under all size groups was treated with chemical fertilizers, whereas the corresponding figure for un-irrigated area was 57%. As regards application of Farm Yard Manure(FYM), it is found that about 58% of irrigated area to gross irrigated area was received FYM against the corresponding figure of 57% in un irrigated area. About pesticides, 48% of the irrigated area was treated with pesticides as against 21% in un irrigated area.
- The use of N(Nitrogen) for all crops under irrigated area was estimated as 65.4 kg/ ha which is higher compared to un irrigated area where the rate of use was 32.5 kg/ha. The rate of application of P for all crops was 27.3kg/ha in irrigated area against 18.5 kg/ha in un-irrigated area. The application of K in irrigated area was 17.0kg/ha against 7.8kg/ha in un irrigated area for all crops.
- The number of cattle, buffaloes, sheep, goats, pigs &poultry held by the operational holders during 2006-07 for all size groups was estimated as 97.4 lakh, 8.2 lakh, 15.1 lakh, 57.2 lakh, 4.5 lakh respectively.
- The percentage number of operational holdings who took institutional credit for agricultural purposes to total operational holdings was 15.6% for all size groups, whereas the corresponding figure for marginal, small, semi med, medium & large holdings were 11.4%, 19.7%, 24.7%, 30.3% & 33.5% respectively.
- Out of total of 43.55lakh operational holdings in the state, 15.68 lakh (36.%) operational holdings was estimated to have used certified seeds, whereas number of holdings who took foundation programme was 0.08 lakh (0.2%).

# Govt. of Odisha, Planning & Coordination Department

S.No.	Activity		Response
1	Year/month of initiation		June 2009
2.	Year/Month of completion(if completed)		March 2010
3.	Name of the executing office/organization		Poverty & Hanuman Development monitoring Agency (PHDMA), Planning and Coordination Department, Government of Odisha through a TSI-Human Development Foundation (HDF) and PRATHAM
4.	Name of the Survey	:	PAEHELI (People's /audit of Health, Education and Livelihood)
5.	Subject & Nature of the survey		Human Development/Other related Indicators through Household survey
6.	Contact details of the office along with e-mail id		Poverty & Human Development Monitoring Agency (PHDMA), Planning and Coordination Department, Government of Odisha, Secretariat, Bhubanewswar, email:-phydma@yahoo.in

**Introduction of the Survey with objectives:** PAHELI stands for People's Audit of Health, Education and Livelihood. The report is based on people's perceptions about Human Development Indicators (HDI). The Government of Odisha took a bold initiative in the year 2009-10 to hear the voices of the people about the impact of health, education and livelihood programmes implemented in the State. This initiative was supported by UNDP under the "State Plans for Human Development"

**Coverage:** The survey covered 17,868 households in 880 randomly selected villages of all 30districts and 60,727 persons were interviewed.

**Sampling design:** Using standard Probability Proportional to the Size (PPS) sampling technique, 30 villages for each district were randomly selected. In each village, 20 households were randomly selected as standard sample size. Further, in each village every fifth household was selected till the target was reached for the purpose of data collection. The method allowed villages with larger populations to have a higher chance of being selected in the sample. This sampling strategy helped to generate a representative picture of each of the surveyed districts.

# Directorate of Animal Husbandry and Veterinary Services, Odisha, Cuttack

- 1. **Year/Month of initiation**:- Integrated Sample Survey for estimation of Major Livestock Products such as Milk, Egg and Meat is started in the State of Odisha during the year 1976. The integrated Sample Survey Scheme is a Centrally Sponsored Scheme with 50:50 as the Central and State share. The scheme is implemented by the Department of Animal Husbandry, Dairy and Fisheries through State Animal Husbandry Department. The revised module of estimation of major livestock products is implemented from Summer 2012-13.
- 2. **Year/Month of Completion:-**The survey is conducted from March to February. The entire period of one year is divided into 3 seasons of 4 months each.

#### The Seasons are----

Summer	1st March to 30th June (122 days)
Rainy	1st July to 31st October (123 days)
Winter	1st November to 28th or 29th February
	(120 days or 121 days in a leap year

The annual estimate of major livestock products for the year 201`1-12 is already submitted to Govt. of India.

- 3. **Name of the Executing Office/Organisation:-**Director of Animal Husbandry and Veterinary Services, Odisha, Cuttak.
- 4. **Name of the Survey:-**Integrated Sample Survey.
- 5. **Subject and Nature of Survey:-** Estimation of Animal Nos. and Major livestock Production is done through 3 stage stratified random sampling with district as the stratum.
- 6. **Contact details of the office along with e.mail ID:-**Director of animal Husbandry and Veterinary Services, Odisha, Cuttacke.mail ID:statisticsah@gmail.com.

#### **Detailed Information:**

**Introduction of the Survey with objectives:-** The ISS is introduced during the year 1976 with an object to estimate season wise production of Milk, Egg, Meat & Wool all over India. Besides above production, the number of animals in Milk, dry and no. of laying birds are estimated. The estimated figures along with targets, achievements of A.I are approved in TCSD meeting.

**Coverage:-**The survey is conducted in the rural areas of the State however, for estimating yield of meat per animal, information is collected from the sample of registered slaughter house in the district.

**Sampling Design:-**The sampling design is a stratified three stage design with district as stratum. The first stage units are villages, second stage units are house-holds and third stage units are animals.

**Field work:** The field work for (i) Complete Enumeration – This is done by the area LIs with supervision by concerned VAS, (ii) Data Collection for detail/survey:- This is done by the SEs posted in the CDVO offices for five villages each.

**Data Processing:-**The collected schedules for complete enumeration are submitted to the Directorate by the concerned CDVOs within 15<sup>th</sup> of the succeeding month of the beginning of the season. In the Directorate, sub-sample wise seasonal estimates of no. of animals/birds are calculated and relative standard errors from these estimates are calculated. Similarly after the end of a season, the detailed survey schedules are submitted by the concerned CDVOs to the Directorate. In the Directorate, the season wise estimation of production of MLP such as Milk & Egg are prepared sub-sample wise and relative standard errors is calculated.

The meat production is estimated alter receipt of slaughter house report and detailed survey schedules. From the above data, the estimated result for a particular season is calculated which is the simple average of the combined sample.

Major Findings:-The major findings from the above sample study are as follows:-

- 1. District wise no. of animals in Milk such as cross bred indigenous cattle, buffalos and goats.
- 2. District wise no. of Milch animals of CB, indigenous cattle and buffalos.
- 3. No. of layers both deshi and improved fowls and ducks.
- 4. No. of animals slaughtered during the season.
- 5. Milk, Egg and Meat production of the district as well as the State.
- 6. Estimation of the Poultry meat of the state.
- 7. Utilisation of Milk and Dung.

## **Directorate of Agriculture, Punjab**

Agriculture Census 2010-11 and Input Survey 2011-12

1. Year/month of installation 1 July 2010 to 30 June 2011

2. Year/month of completion March 2013

3. Executive office Director of Agriculture

4. Survey Agriculture Census2010-11

(20% village Sample) 2595 villages

Input Survey-2011-12

(7% village Sample) (930 villages)

5. Nature of Survey
Main source of basic structure of operational Holdings other characteristics such as land use,

Cropping pattern, irrigation, tenancy state etc.

1st Agriculture Census was conducted in 1970-71 on the basis of revenue record. it is 100% centrally sponsored scheme Agriculture Census is conducted in 20% villages (2595 villages) of the state randomly selected. Fieldwork of survey/census is completed with the stipulated period as fix by Govt. of India. Census data scrutinized by Stat section thereafter data sent to computer Centre for processing and report sent to Govt. of India. Agriculture Census contains the information such as land use, Cropping pattern irrigation, tenancy status operation holdings and area operated etc. Secondly, Input Survey contains the information of Agriculture input such as fertilizer, seed, pesticide, machinery etc. This information proves very useful in planning and for the information of Agriculture policies etc.

## **Directorate of Economics & Statistics, Tamil Nadu**

#### 1. STUDY / SURVEY ON NON-PROFIT INSTITUTIONS

Year / Month of Initiation : 2008 April Phase-I and Phase-II

Year / Month of completion : 2010 September

(if completed)

Survey

Name of the Executing : Department of Economics and Statistics
 Office / Organisation

Name of the Survey : Conduct of Survey / Survey on Non-Profit Institutions in

Tamil Nadu

• Subject and Nature of the : <u>Subject</u>: Compilation of Satellite Accounts in respect of

Non-Profit Institutions in Tamil Nadu.

Nature of the Survey: It is 100% and complete enumeration of Non-profit Institutions Registered under

Societies Act, 1860 or Public Trust Act.

• Contact details of the office : dessiu@gmail.com

along with e-mail ID

**Overview:** The need was felt by the System of National Accounts since the presence of Non-Profit Institutions is significantly felt as they account for 7 to 10% of Non-Agricultural Employment. The System of National Accounts primarily wanted to develop a criteria for the allocation of Non-Profit Institutions to the appropriate institutional sectors of SNA (i.e.) Government and Financial and Non-Financial Corporations Sector. Many Non-Profit Institutions receive contributions from internal and external sources besides grants from Government on annual basis. Therefore, their contributions to the State Income Estimation is felt quite essential to ascertain their share. Also, Satellite Accounts are to be analysed to shed further light on data features needed by the System of National Accounts.

**Coverage:** All the Non-Profit Institutions registered under Societies Act, 1860 are covered upto 31.03.2008. 1,41,322 such registered Non-Profit Institutions were covered throughout Tamil Nadu. Updation of listing of Non-Profit Institutions upto 31.03.2011 have been completed.

**Sampling Design:** It is a 100% enumeration and hence no sample design applicable.

**Field Work:** The Field Staff of the Department of Economics and Statistics were entrusted with the field work of enumeration.

**Data Processing:** The data processing was exercised by the computer wing of the Department of Economics and Statistics.

**Major Findings:**Out of 1,41,322 registered societies, only 39,270 (28%) Non-Profit Institutions were traced and 1,02,052 were not traced, which constitute 72% of the registered Non-Profit Institutions.

Of the traced Non-Profit Institutions, only 8,412 (6%) have supplied the Audited Accounts, 9,982 (9%) have furnished oral accounts and the remaining 21,326 (15%) have not maintained accounts.

#### 2. STUDY / SURVEY ON ANNUAL SURVEY OF INDUSTRIES

Name of the Survey
 : Annual Survey of Industries

Year/month of initiation : 2009-10/ April-2011

2010-11/April-2012

Year/ month of completion (if : 2009-10/ September-2011

completed) 2010-11: Under progress

Name of the Executing : Department of Economics and Statistics,

Office/ Organization Chennai.- 600 006

Subject & Nature of the : An important source of industrial Statistics,

Survey for organised sector of industries in the

State.

• Reference period : 1st April to 31st March

Contact details of the office : Phone No: 044-24321189. E-mail:

along with e-mail id desindus1@gmail.com

**Introduction of the survey with objectives:** The Annual Survey of Industries provides information on industries coming under the organised Manufacturing sector comprising activities related to Manufacturing process, repair services, generation and transmission of Electricity, gas and water supply and cold storage. The survey is conducted annually under the statutory provisions of the Collection of Statistics Act, 1953, upto 2009-10. The said act was repealed by the enactment of Collection of Statistics Act, 2008. Since, 2010-11, this survey is being conducted under the provisions of the new Act. NSSO (FOD) and the DES are carrying out the field work from the year 2000-01. The Central Statistics Office (IS Wing) is responsible for framing of instructions, selection of samples and giving guidelines to processing of data.

#### **OBJECT OF THE SURVEY:**

- 1. To estimate the contribution of registered manufacturing industries as a whole and of each type of industry to National Income.
- 2. To study the structure of the industry as a whole and of each type of industry systematically.
- 3. To analyse various factors influencing industries in the country and;
- 4. To construct a comprehensive, factual and systematic basis for formulation of industrial policies.

#### Coverage:

- i) All the factories and industrial units registered under section 2m(i) 2m (ii) of the factories Act 1948 employing 10 (or) more workers using power and 20 or more workers but not using power on any day of the preceding 12 months.
- ii) Beedi and Cigar manufacturing establishments registered under the Beedi and Cigar workers Act 1966 employing 10 (or) more workers using power and employing 20 or more workers but not using power on any day of the preceding 12 months.
- iii) Certain services and activities like cold storage, water supply repair of motor vehicles and other consumer durables like watches etc.
- iv) All the electricity undertakings engaged in the generation, transmission and distribution of electricity registered with the Central Electricity Authority (CEA) irrespective of their employment size being covered in Annual Survey of Industries from 1962 onwards.

**Sampling Design:** There has not been any major change in the sampling strategy of ASI 2009-10 from that of ASI 2008-2009.

- 1. The Census Sector has been defined as follows:
- a) All industrial units belonging to the six less industrially developed states/ UT's viz. Manipur, Meghalaya, Nagaland, Sikkim, Tripura and Andaman & Nicobar Islands.
- b) For the rest of the twenty-six states/ UT's., (i) units having 100 or more workers, and (ii) all factories covered under Joint Returns.
- 2. Strata (State by 4-digit of NIC-04) having less than or equal to four units after selecting the Census Sector units as defined above are also selected as census sector.
- 3. From the remaining frame, samples were drawn considering a uniform sampling fraction of 19% for the states within a State X 4-digit NIC with a minimum of 4 units evenly distributed in two sub-samples.

**Field Work:** The staffs of Department of Economics and Statistics of the State involves in the field work for the survey.

**Data Processing:** The Central Statistical Organisation also supplies requisite software packages for, scrutiny, tabulation and validation of the data .The data thus complied are analyzed and estimation for the residual sample by arriving multiplier as per the guidelines given by CSO.

**Pooling of both Central and State samples:** After finalization of the state sample results, the CSO census and State sample data put together and pooled estimates for the year are arrived at State Head Quarters of the department.

**Major Findings:** The report would contain the estimated results on important Industrial characteristics such as changes in Fixed Capital, Working Capital, Invested Capital, Number of Employees, Workers and Emoluments

paid to them, Value of Output, Value of input and Value Added etc. Besides, a comparative analysis has been done in the report to show the trend of Industrial growth in the State and at District Level.

# 9<sup>TH</sup> AGRICULTURAL CENSUS (2010-11)

# Phase II - House Hold Survey

1	Year/month of initiation:	February 2012
2	Year/month of completion (if completed)	April 2012
3	Name of the Executing Office/Organization	Department of Economics and Statistics, Chennai, Tamil Nadu.
4	Name of the Survey	Phase II - House hold Survey
5	Subject & Nature of the Survey	Collection of data such as operating holders, land utilisation, usage of wells and tube wells and crop wise area cultivated.
6	Contact details of the office along with e-mail ID	desagri1@gmail.com

# **Detailed Information:**

Introduction of the Survey with Objectives	The Agricultural Census is conducted quinquennially with cent percent financial Assistance and guidelines from Government of India. In continuance of the 9th Agricultural Census House hold survey has been conducted under Phase II. The objective of the survey id to gather particulars of holders pertaining to tenancy status, land utilisation, irrigation status, cropping pattern etc.
Coverage	Phase-II: 20% of Sample villages as per TRS Villages
Sampling Design	Simple Random Sampling method adopted.
Field Work	Field work is carried out by the Village Administrative Officers of Revenue Department.

Data Processing	Data Processing is done by NIC under the direction of Government of India.
Major Findings	To find out:  1. Irrigation facilities availed by the holders.  2. Utilisation of the land used by the holders  3. Number of wells and tube wells used by the holders.  4. Number of crops raised by the holders.

# NATIONAL SAMPLE SURVEY: (2009-10)

1. Year / month of initiation	2009-10 / July-2010.(67 <sup>th</sup> Round)		
Year / month of completion     (If Completed)	2011 / Jnne-2011.		
Name of the Executing Office / Organization;	Department of Economics and Statistics Chennai-6.		
4. Name of the Survey	National Sample Survey		
5. Subject & Nature of the Survey	Unincorporated Non-agricultural Enterprises(Excluding Construction)	Socio Economic Survey	
6. Contact details of the office	Department of Economics and Statistics, Teynampet,		
along with e- mail ID:	Chennai-6. desnss1@gmail.com		

# Detailed information:

Introduction of the Survey with objectives :	Survey on Unincorporated Non-agricultural Enterprises (Excluding Construction).
Coverage :	The 67 <sup>th</sup> round (July 2010-June 2011) of NSS is earmarked for surveys on Unincorporated Non-agricultural Enterprises (Excluding Construction).
Sample Design:	A stratified multi-stage design has been adopted by NSSO. The first stage unit (FSU) for Villages and (UFS) for Urban.
Field Work:	Separate S.I / A.S.I visit the selected sample area and fill Schedules supplied by Government of India.
Data processing:	Data entry at District level and processing at State level.

# NATIONAL SAMPLE SURVEY: (2010-11)

1. Year / month of initiation	2010-11 / July 2011. (68th Round)		
2. Year / month of completion	2012 / June-2012.		
(If Completed)			
3. Name of the Executing Office /	Department of Economics and Statistics Chennai-6.		
Organization;			
4. Name of the Survey	National Sample Survey		
5. Subject & Nature of the Survey	1. Consumer	Socio Economic Survey	
	Expenditure		
	2. Employment		
	and		
	Unemployment.		
6. Contact details of the office along with	Department of Economics and Statistics Teynampet, Chennai-		
e- mail id:	6. desnss1@gmail.com		

## Detailed information:

Introduction of the Survey with objectives	Survey on Consumer Expenditure & Employment and
:	Unemployment.
Coverage :	The 68th round (July 2011-December 2012) of NSS is
	earmarked for surveys on Consumer Expenditure
	&Employment and Unemployment.
Sample Design:	A stratified multi-stage design has been adopted by NSSO.
	The first stage unit (FSU) for Villages and (UFS) for Urban.
Field Work:	Separate S.I / A.S.I visit the selected sample area and fill
	Schedules supplied by Government of India.
Data processing:	Data entry at District level and processing at State level.

# NATIONAL SAMPLE SURVEY: (2011-12)

<u> </u>			
1. Year / month of initiation	2011-12 / July 2012 (69th Round)		
2. Year / month of completion	2012 / December -2012.		
(If Completed)			
3. Name of the Executing Office /	Department of Economics and Statistics		
Organization;	Chennai-6.		
4. Name of the Survey	National Sample Survey		
5. Subject & Nature of the Survey	Drinking water, Socio Economic		
	sanitation,	Survey	
	hygiene and		
	housing		

	condition	
	2. Particulars of slums.	
6. Contact details of the office	Department of Economics and Statistics	
along with e- mail ID	Teynampet Chennai-6. desnss1@gmail.com	

# Detailed information:

Introduction of the Survey with objectives :	Survey on Drinking water, sanitation, hygiene
	and housing condition, Particulars of slums.
Coverage :	The 69th round (July 2012-December 2012) of
	NSS is earmarked for surveys on Drinking
	water, Sanitation, Hygiene and housing
	conditions and survey on slums.
Sample Design:	A stratified multi-stage design has been
	adopted by NSSO. The first stage unit (FSU) for
	Villages and (UFS) for Urban.
Field Work:	Separate S.I / A.S.I visit the selected sample
	area and fill Schedules supplied by Government
	of India
Data processing:	Data entry at District level and processing at
	State level.

# Directorate of Economics & Statistics, Andaman and Nicobar Administration

The supervisions/enumeration of the following Sample Surveys conducted by the different Ministries of the Govt. of India was undertaken by this Directorate.

- 1. Post Enumeration Survey of Population Enumeration for department of Census, Govt. of India, Ministry of Home Affairs during April-May, 2011.
- 2. Second Annual employment-Unemployment Survey 2011 for Ministry of Labour & Employment, Govt. of India, Labour Bureau, Chandigarh during the period from July, 2011 to June 2012.

# Union Territory of Dadra and Nagar Haveli

#### **SAMPLE SURVEYS DURING 2009-10**

1. Year/Month of initiation : 1971-72

2. Year/month of completion (if completed) : Not applicable.

3. Name of the Executing office/Organization :Department of Planning &Statistics

4. Name of Survey :Crop Estimation Survey of Kharif crops (Paddy and

Ragi)

5. Subject & Nature of the survey : To estimate the average yield and total

Production of the two major Khariferps (Paddy and

ragi) in the Union Territory.

6. Contact details of the office along with

e-mal id : Shri U.R. Vyas, Asstt. Director (Plg. & Stat.)

Administration of Dadra and Nagar Haveli,

2<sup>nd</sup> Floor, Secretariat, Silvassa-396230.

Ph.No. & Fax No. (o260)-2642985 e-mail id: ad-plan-dnh@nic.in

#### Detailed information:

Introduction of the survey with objectives:

Crop Estimation Survey of Kharifcrops(Paddy and Ragi). The survey is conducted every year to estimate the average yield and total production of the two major Kharif crops (Paddy and Ragi) in the Union territory. There are 72 villages in the U.T but survey is restricted to 70 villages as area of two villages is submerged due to Damanaganga Reservoir Project.

Coverage

Size of plot being selected is 5 mts x 5 mts. Selection of Survey number/plot –hissa and plot marking have been made at a time. Keeping in view the available infrastructure total 152 experiments are planned in such a way that 2 experiments per crop per village are conducted. The random sampling technique is adopted for the survey. As a first size stratum and the requisite number of sample villages are selected by simple sampling without replacement. The second stage stratum of the design is the selection of the survey number (i.e. plot-hissa) by random method. While the selected plot of 5 mts.x5 mts. is the third stage stratum, for which random number applicable to the former was referred to.

#### Sampling Design:

Out of 70 villages 39 villages selected, 55.71% of the total villages, which are considered common for both the paddy and ragi crops under the survey. Size of plot being slected since 1971-72 is 5 mts.x5mts.

#### Field Work:

For the work of field enumeration, 21 enumerators i.e. Patel Talaties (Revenue Department) and the Gram Sevaks (Development & Planning Department0 are appointed, for the work of supervision 9 supervisors i.e. investigators and Statistical Asstt. From the Statistical cadre are appointed under the overall supervision of the Asstt. Director (Planning & Statistics), DNH, Silvassa. The period of Survey is September-2009 to December, 2009.

#### Data Processing:

After completion of field work all filed in schedules are scrutinized and data entry made at H.Q. Different Tables are generated and U.T level Tables in consolidated form are submitted in N.S.S.O., FOD, Faridabad.

### Major Findings:

No Major finding observed up to last year. The current year data is yet to be compiled.

#### List of Source Agencies, which have sent NIL reply in respect of Sample Surveys:

- 1. Directorate of Economics & Statistics (DES), Delhi
- 2. Ministry of Chemicals & Fertilizers, New Delhi
- 3. Ministry of Finance, Department of Revenue, New Delhi
- 4. Ministry of Road Transport & Highway, New Delhi
- 5. Director Economics & Statistics (DES), Jharkhand
- 6. Directorate of Agriculture, Meghalaya
- 7. Director Economics & Statistics, Chandigarh Administration
- 8. Director Economics & Statistics, Andaman & Nicobar Administration
- 9. Ministry/o Tourism, New Delhi
- 10. Health & Family Welfare Training Centre, Karnataka
- 11. Ministry of Mines, Indian Bureau of Mines, Nagpur
- 12. Ministry of Communication & Information Technology, New Delhi
- 13. Central Water Commission, New Delhi
- 14. Directorate of Economics & Statistics, Rajasthan
- 15. Planning, Programme Monitoring and Statistics Department Karnataka
- 16. Labour Bureau, Haryana Chandigarh
- 17. Tariff Commission, New Delhi
- 18. Directorate of Mines & Geology, Goa
- 19. Office of the Director of Health Services, Meghalaya
- 20. Directorate Of Evaluation Organisation, Rajasthan
- 21. Directorate of Economics & Statistics, Andhra Pradesh
- 22. Directorate of Planning & Statistics, Lakshadweep
- 23. Directorate Of Textiles, Nagpur, Maharashtra
- 24. Directorate of Industry & Commerce, Thiruvananthapuram
- 25. Tamil Nadu, Forest Department
- 26. Office of the Commissioner of Labour, Gandhinagar Gujarat
- 27. University of Kashmir, Srinagar

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## Officials associated with the publication:

Shri A.K . Mehra,
Additional Director General

Shri R.K. Khurana,
Deputy Director General

Smt. Pravin Horo Singh,
Director

Shri Nitish Kumar Joint Director

Shri P.K. Srivastava Deputy Director

Shri D.P. Dhugga Assistant Director

Ms. Chavi Maheshwari Statistical Investigator Gr. II