

BASELINE SURVEY: PHASE VI

RAYAGADA DISTRICT

Special Program for Promotion of Millets in Odisha
(Shree Anna Abhiyan)



Submitted to
Directorate of Agriculture and Food Production,
Government Of Odisha
2025



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Nabakrushna Choudhury Centre for Development Studies
ICSSR Institute in Collaboration with Government of Odisha

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FOREWORD

Sustainable Development Goal 2 seeks to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture. Millets offer a promising solution to help accomplish these objectives. The Shree Anna Abhiyan (SAA) is a great initiative of Odisha government that shows the state's commitment to reviving the cultivation of millets that are not only climate-resilient but has significant implications on health and nutrition of people. The programme has brought different stakeholders to work together to reinstate the significance of millets in Odisha's agricultural landscape. I am delighted to have the opportunity to write this foreword for the 'Special Programme for Promotion of Millets in Odisha.'

The SAA programme has emerged from a consultation with diverse array of stakeholders including NCDS. A memorandum of understanding (MoU) was signed on February 27, 2017, bringing together key stakeholders including the Directorate of Agriculture and Food Production (DAFP), NCDS, and the Watershed Support Services and Activities Network (WASSAN). This MoU delineated the framework for concerted efforts towards implementing the SAA, with NCDS assuming the pivotal role of anchoring the research secretariat. NCDS embarked on a comprehensive survey initiative encompassing Baseline, Midterm, and End-line assessments in the designated blocks of the SAA. These surveys, designed to provide a situational analysis of the status of millet production, marketing, consumption, represent a critical step towards informed intervention and strategic decision-making. The findings of the baseline survey presented in the report would provide a situational analysis of the current status of the millet at the time of survey and a reference point to analyse the impact of intervention.

As the Director, I commend all the dedicated team members of NCDS for their unwavering commitment and tireless efforts in achieving the objectives of the SAA. Your hard work and perseverance have played a crucial role in turning our shared vision into reality. I also extend my heartfelt gratitude to our partners, stakeholders, and collaborators for their invaluable support and steadfast dedication in this direction.



Dr. Yeddula Vijay, IAS
Director, NCDS

ACKNOWLEDGEMENT

It gives me immense pleasure to extend my heartfelt gratitude to all those who contributed to the successful completion of the “Baseline Survey Report of Phase VI, 2022”. This endeavour was truly a collaborative effort, and I am deeply grateful for the unwavering support and dedication demonstrated by each individual and organization involved. First and foremost, I would like to express my sincere appreciation to the research team of Nabakrushna Choudhury Centre for Development Studies (NCDS), Bhubaneswar, for spearheading the preparation of this report. Your commitments to excellence and tireless efforts have been instrumental in ensuring the quality and accuracy of the findings presented.

I extend my heartfelt thanks to the related government departments, organizations, and stakeholders, including farmers' associations, whose invaluable support and cooperation played a pivotal role in the successful completion of this study. Special mention goes to Dr. Arabinda Kumar Padhee, Principal Secretary to the Government, Department of Agriculture & Farmers' Empowerment (DA&FE), Mr. Prem Chandra Chaudhary, Director of Agriculture DA&FE, and the Joint Director of Agriculture for their invaluable contributions.

I would like to extend my sincere appreciation to our esteemed Director, Dr. Yeddula Vijay (IAS), Director of Nabakrushna Choudhury Centre for Development Studies (NCDS). Your guidance, wisdom, and valuable suggestions have been invaluable in shaping the direction of this study. Many thanks to NCDS administration for their continuous support for smooth functioning of the research work. I also wish to acknowledge the contributions of Dr. Biswabas Patra and Dr. Rashmi Misra for their valuable insights and assistance.

I would also like to express my appreciation to the members of the Programme Secretariat (Watershed Support Services and Activities Network, WASSAN), particularly Mr. Dinesh Balam, Programme Secretariat, and the facilitating agencies and staff of the concerned areas under study for their support and cooperation. I am particularly grateful to Mr. Sushil Kumar Senapati, Ms. Kalpana Pradhan and Mr. Bikash Pradhan, along with the dedicated staffs of the State Project Monitoring Unit (SPMU), for their unwavering support and assistance throughout the duration of this project.

My sincere gratitude goes out to the Chief District Agricultural Officer (CDAO) of Rayagadh district, the Scheme Officer, District Programme Coordinator, Block Coordinators, and other block-level officials for their invaluable support in providing crucial information. Once again, thank you all for your invaluable contributions, dedication, and support. It has been a privilege to work alongside each of you, and I look forward to continued collaboration in our future endeavours. I extend my best wishes for the success of the publication.

Dr. Sandhya R. Mahapatro
Project Director

EXECUTIVE SUMMARY

Rayagada district is one of the 17 districts where the “Special Programme for the Promotion of Millets in Odisha or (hereafter) Shree Anna Abhiyan (SAA)” Phase VI has begun in the Kharif 2021. Baseline Survey 2022, Phase VI, conducted in Rayagada district, collected data from 80 sample households.

The survey revealed that among the surveyed households, 77.50 per cent belonged to Scheduled Tribes (STs), while only 1.25 per cent belonged to Scheduled Caste (SC). Other Backward Classes (OBC)/ Socially and Educationally Backward Class (SEBC) accounted for 21.25 per cent of the households. The total population of the surveyed households is 469, of which 46.70 per cent are male and 53.30 per cent are female and most of the households are belongs to Hindu community. It is also found that out of 80 sample households 95.00 per cent possess ration cards.

Significant portion of the population (48.40 per cent) are farmers and the share of wage laborers is 5.05 per cent. Government employees represent 3.19 per cent and private employees 0.21 per cent and housewives comprise 8.51 per cent and another 6.12 per cent of the sample population in the working age group is found to be unemployed. Out of the total of 80 households, 56 (70.00 per cent) have *Semi-pucca* houses, 17 households (21.25 per cent) have *Katcha* houses, and only 7 households (8.75 per cent) have *Pucca* houses.

From the field survey it is found that all the 64 sample households have cultivated millets in the year 2021. Total operational area among the sample households in the one selected block of Rayagada district is 106.1 acres is under millets cultivation with the average yield of millets production among the sample households is 3.25 quintals per acre with a total millets production of 345 quintals. It was also observed that almost all of the millets cultivating households use their own seeds. Out of total sample household, 95.31 percent of HHs used local seeds, 4.69 from relatives and 3.1 percent used HYV seeds. The most common method of millets cultivation among the sample households is Line Sowing (LS), which is used by 64.06 per cent of households. Broadcasting methods were found to be used by 21.88 per cent of the respondent households, while Line Transplantation (LT) is being used by another 14.06 per cent.

As the Baseline Study found, out of the total 469 populations, 449 (95.73 per cent) consume millets in different seasons and at different meals of the day and the consumption of millets All the Sample HHs consume millets in Summer ,Rainy and winter seasons. The data indicates that the majority of the sample households consume millets during lunch (100 per cent) and dinner (92.50 per cent) . *Jau/Torani* is the popular recipe among the surveyed households as all of them are found to be consuming this recipe. The other popular recipes are *Tampo/Pitha*, *Khiri* and *Idli/ Upma*.

It is also observed that a majority of the millet cultivating sample households (71.43 per cent) process millets through traditional methods, while 26.98 per cent of households process their millets through machines and 1.59 per cent of household use both methods. In addition to that it is also found that out the total millet cultivating sample households; only 25 households sell their millets which constitute 39.1 per cent. Moreover, a large number of households sell their millets to money lender/ Sahukar (40.00 per cent) followed by middlemen (16.00per cent) and at mandi (32.00 per cent)

CONTENTS

Sl.	Title	Page No.
	<i>Foreword</i>	i
	<i>Acknowledgment</i>	ii
	<i>Executive Summary</i>	iii
	<i>Contents</i>	iv-v
	<i>List of Tables</i>	Vi
	<i>List of Figures</i>	Vii
	<i>Abbreviations</i>	Viii
Chapter I	Introduction	1-6
1.1	Background	1
1.2	District Profile	2
1.3	Objectives	5
1.4	Methodology	5
1.4.1	Sample design	5
1.4.2	Data Collection, Compilation and Analysis	6
1.5	Limitations of the Study	6
1.6	Chapters	7
Chapter II	Socio-Economic Profile	8-12
2.1	Introduction	8
2.2	Social Category	8
2.3	Sex	8
2.4	Age Group	9
2.5	Education	9
2.6	Religion	10
2.7	Ration card	10
2.8	Occupation	10
2.9	Annual Income	10
2.10	House Structure	11
2.11	Land ownership	11
2.12	Conclusion	12
Chapter III	Production of Millets	13-15
3.1	Introduction	13
3.2	Cropping Pattern	13
3.3	Area, Production, and Yield of Millets	13
3.4	Type of Millet Seeds used	14
3.5	Perception on Quality of Seeds	14
3.6	Package of Practices	14
3.7	Use of Fertilizer and Pesticides	15
3.8	Reason for not Cultivating Millets	15
3.9	Conclusion	15
Chapter IV	Consumption of Millets	16-17
4.1	Introduction	16

4.2	Consumption of Millets during different Meals of the Day and across seasons	16
4.3	Millet Recipes Consumed	16
4.4	Consumption of Millets by different Age Groups	17
4.5	Conclusion	17
Chapter V	Processing and Marketing of Millets	18-19
5.1	Introduction	18
5.2	Processing of Millets	18
5.3	Marketing of Millets	18
5.4	Mode of Selling Millets	19
5.5	Conclusion	19
	Annexure – 1	20
	Annexure- 2 Households Schedule for Baseline Survey 2022-23, Phase VI	21-26

LIST OF TABLES

Sl.	Title	Page No.
Table 1.1	Socio-economic and Demographic Features of Rayagada District	4
Table 1.2	Sample HHs covered under the Baseline Survey Rayagada District	5
Table 2.1	Distribution of Sample Population by their Age Group	9
Table 2.2	Distribution of Sample HHs by their Education status	9
Table 2.3	Distribution of Sample HHs by their Occupation	10
Table 2.4	Distribution of Sample HHs by their annual income	11
Table 3.1	Area, Production and Yield of Millets	14
Table 3.2	Distribution of Sample HHs by their Perception on Quality of Millet Seeds	14
Table 3.3	Distribution of Sample HHs by Package of Practices used for Millets cultivation	14
Table 3.4	Distribution of Sample HHs by Use of Fertilizer and Pesticides	15
Table 4.1	Distribution of Sample HHs by Consumption of different Millet Recipes	17
Table 4.2	Distribution of Sample Population by Consumption of Millets in different Age Groups	17
Table 5.1	Distribution of Sample HHs by method of Millet Processing	18
Table 5.2	Distribution of Sample HHs by Mode of Selling Millets	19

LIST OF FIGURES

No	Title	Page
Fig 1.1	Rayagada District Map	3
Fig 2.1	Sample HHs by their Social category	8
Fig 2.2	Sample population by Sex	8
Fig 2.3	Sample HHs by Possession of Ration card	10
Fig 2.4	Sample HHs by their House structure	11
Fig 2.5	Sample HHs by their land ownership	11
Fig 3.1	Sample HHs by their Cropping Pattern under different crops	13
Fig 3.2	Types of Millet seeds used by Sample HHs	14
Fig 3.3	Reason for not cultivating Millets by Sample HHs	15
Fig 4.1	Consumption of Millets during different meals of the day by Sample HHs	16
Fig 5.1	Marketing of Millets by Sample HHs	18

ABBREVIATIONS

AAO	:	Assistant Agriculture Officer
AL	:	Agricultural Labour
ATMA	:	Agricultural Technology Management Agency
AWC	:	Anganwadi Centre
CBOs	:	CSAA unity Based Organisation
CCD	:	Centre for CSAA unity Development
CRPs	:	Cluster Resource Persons
CSOs	:	Civil Society Organisations
DAFP	:	Directorate of Agriculture and Food Production
DDA	:	Deputy Director, Agriculture
FA	:	Facilitating Agencies
FGD	:	Focused Group Discussion
FPC	:	Farmer Producer Company
FPO	:	Farmer Producer Organizations
GP	:	Gram Panchayat
Ha	:	Hectares
HHs	:	Households
ICDS	:	Integrated Child Development Scheme
LS	:	Line Sowing
LT	:	Line Transplanting
MDM	:	Mid-Day Meal
MFP	:	Minor Forest Produce
MGNREGA	:	Mahatma Gandhi National Rural Employment Guarantee Act
MSP	:	Minimum Support Price
NCDS	:	Nabakrushna Choudhury Centre for Development Studies
OBC	:	Other Backward Classes
OC	:	Other Castes
OFS	:	Odisha Finance Service
SAA	:	Odisha Millet Mission
PDS	:	Public Distribution System
SC	:	Scheduled Caste
SMI	:	System of Millet Intensification
SP	:	Sale Price
ST	:	Schedule Tribe
WASSAN	:	Watershed Support Service and Activities Network

Chapter I

INTRODUCTION

1.1 Background

Millets are indigenous to many parts of the world. The most widely grown millets are sorghum and pearl millets, which are important crops in India and parts of Africa. Millets may have been consumed by humans for about 7,000 years and potentially had a pivotal role in the rise of multi-crop agriculture and settled farming societies.

Millet is a cereal grain that belongs to the *Poaceae* family, commonly known as the grass family. Millet is a small, round whole grain grown in India, Nigeria, and other Asian and African countries. Considered an ancient grain, it's used both for human consumption and livestock and bird feed. It has multiple advantages over other crops, including drought and pest resistance. It's also able to survive in harsh environments and less fertile soil. These benefits stem from its genetic composition and physical structure — for example, its small size and hardness. This crop is also divided into two categories — major and minor millets, with major millets being the most popular or commonly cultivated varieties. Major millets include: pearl, foxtail, proso (or white), finger (or Ragi); Minor millets include: Kodo, barnyard, little, Guinea, brown top, fonio, adlay (or Job's tears). Like most cereals, millet is a starchy grain — meaning that it's rich in carbs. Notably, it also packs several vitamins and minerals. Therefore, it may offer multiple health benefits.

The nutrient-rich millets that were fast fading away from the agricultural landscape are now. Thanks to Millet Mission, a special programme for its promotion in tribal areas, the crops have been revived and now it is getting much-needed attention across the State. The Special Programme for Promotion of Millets in Odisha (hereafter Shree Anna Abhiyan, SAA) with a novel organizational structure was initiated by the Government of Odisha in 2017-18 emphasizing production, consumption, processing, and marketing of millets. Cultivation of millets such as Ragi, Gurji and Kosla (small millet), Kodo, Kangu (foxtail millet) and Jowars, which are known as age-old traditional food of the hill dwellers, have been taken up.

As per the existing literature, evolution of millets cultivation dates back to Prehistoric Period and its farming system found to be very primitive. It has been favored by the farmers as well as the people at large because of its climate and draught resilient capacity, short duration crop, nutritional value, healthy and tasty recipes. In India, since many decades' millet as a food crop was just next to paddy. Now days the food prepared from millets is consumed by less people due to availability of subsidized rice with a nominal price by the Government at all the Public Distribution System (PDS). Moreover, the article published in the Times of India, Coimbatore Edition, August 12, 2014 issue also argues that the reason of decline in millet cultivation is attributed to easy availability of rice and wheat in the PDS that are spread all over India.

The SAA program launched in 2017-18 by the govt of odisha tried to revive these nutrient-rich millets in the agricultural landscape. It aimed to promote the production, consumption, processing, and marketing of millets, with a particular focus on tribal areas. The program had a unique structure that emphasized cultivating traditional millets such as Ragi, Gurji, Kosla (small millet), Kodo, Kangu (foxtail millet), and Jowars, which were forest dwellers' age-old foods. This initiative gave millet crops the much-needed attention they deserved and revived their growth across the state. In 2021-22, the SAA (formerly OMM) was expanded to 58 blocks of 17 districts, including Kolnara block of Rayagada district. This baseline survey report aims to provide status of millets production, consumption, processing and marketing in the block before the implementation of the programme. This baseline study attempts to provide necessary information on the above-mentioned dimensions in the Kolnara block of Rayagada district.

1.2 District Profile

Rayagada district is the third largest district in Odisha in terms of its geographical area and it is fifteenth in terms of population including a number of primitive tribal groups. It is full of forests, waterfalls, terraced valleys, meadows especially Bansadhara and Nagabali Rivers are flowing in the district. As per the 2011 Census, the district has an area of 7073 Sq. kilometers with 9.7 lakhs of population (Table 1.1). The district accounts for the 4.54 per cent of the State's territory and shares 2.31 per cent of the State's total population. The density of population is 137 per square kilometer as against 270 persons per square kilometers of the State. In the district there are 2667 villages including 200 un-inhabited, covering 11 Blocks, 11 Tahsils, and 2 Sub Divisions. It has 139514 (14.4 per cent) Scheduled Caste (SC) and 541905 (56.0 per cent) Scheduled Tribe (ST) population. Rayagada District consists of 11 Blocks (Fig. 1.1).

Rayagada is located at the South part of the State, lies between 19° Degree, 0' to 19 Degree 58' North Latitude and bounded by the Kandhamal District in the North, Andhra Pradesh in the South, and Rayagada District in the West. The climatic condition is generally hot with high humidity during May and June and cold during November and December. The monsoon generally breaks during the month of June. Annual rainfall of the district was 1165.8 mm in 2011, which is lower than the normal rainfall i.e. 1285.9 mm. As per the District at a Glance 2016 for Rayagada in the financial year 2014-15, the total production of major crops was 2953400 quintals and Ragi production was 75955 quintals

Fig. 1.1 Rayagada District Map

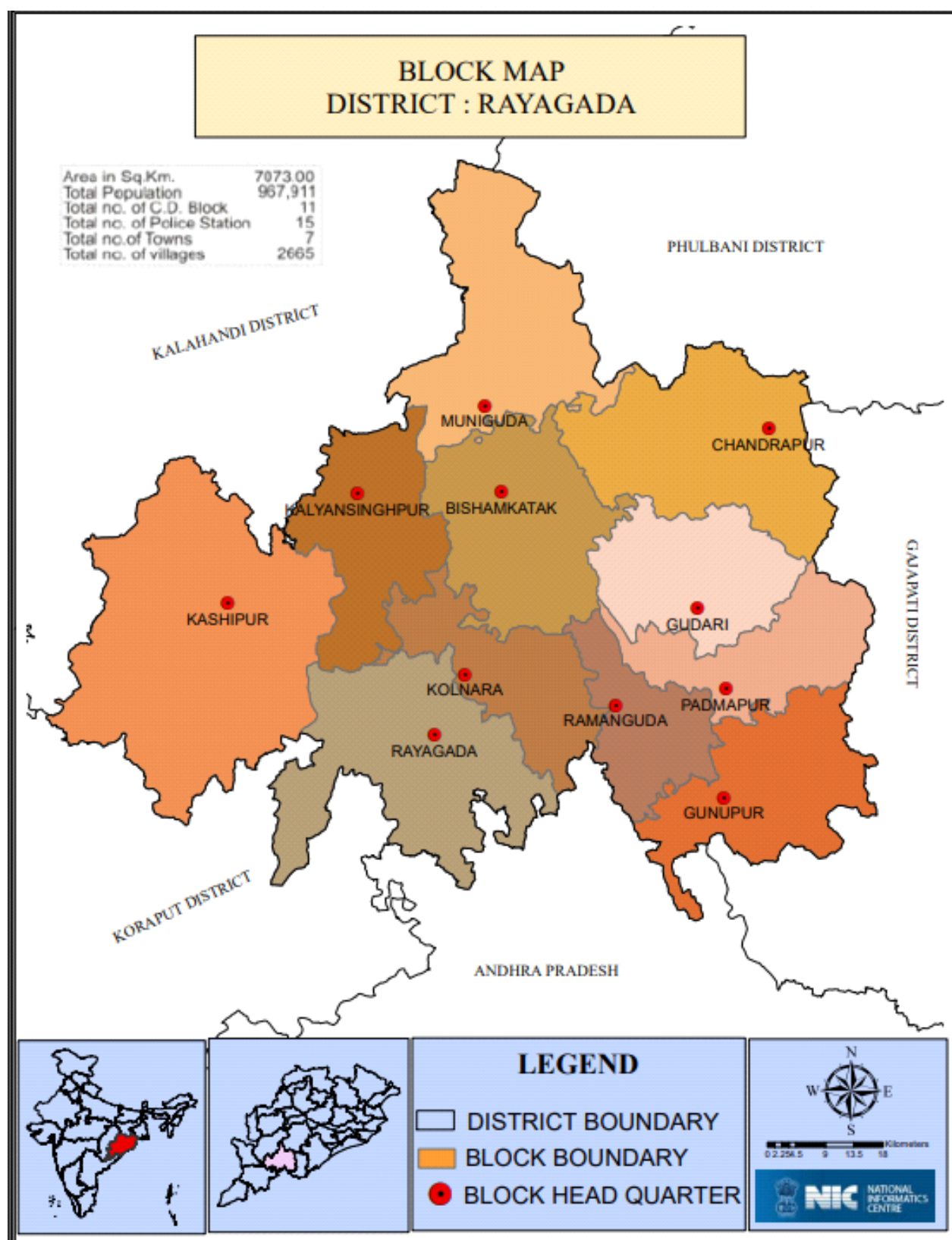


Table 1.1: Socio-economic and Demographic Features of Rayagada District	
Indicators	Value
Census 2011	
Population (in Lakh)	9.7
Male (in Lakh)	4.7
Female (in Lakh)	5.0
Scheduled Caste (in Lakh)	14.4
Scheduled Tribe (in Lakh)	56.0
Others (in Lakh)	29.6
HHs (in Lakh)	2.0
Average HH size	4.8
Sex Ratio	1952
Workers	
Total Worker (in Lakh)	4.7
Main Worker (in Lakh)	2.3
Marginal Worker (in Lakh)	2.4
Non-Worker (in Lakh)	5.1
Work Participation Rate (WPR, %)	48.3
Cultivator as % of Total worker	49.8
Agricultural Laborers as % of Total Worker	4.8
Literacy Rate (%)	49.8
Total Geographical Area (sq.km)	7073
Land Use Pattern (Area in '000 ha) (2014-15) *	
Forest	101
Land put to Non-agricultural use	30
Barren and Non-Cultivable Land	204
Permanent Pasture and Other Agricultural Land	10
Net Area Sown	144
Cultivable Waste Land	9
Old Fallow	23
Current Fallows	42
Miscellaneous Trees and Groves	9
Agriculture, 2014-15*	
Fertilizer Consumption (kg/ha)	54.8
Irrigation, Kharif ('000ha)	71.6
Irrigation, Rabi ('000ha)	28.1
Other Information	
Proportion of village Electrified 9as on march 2014)	28.8
Credit Deposit Ratio (as on December 2015)	38.2
No. of Anganwadi Centers, 2014-15	191257
No. of Job Card Issued (cumulative, March 2015)	184488
HH provided employment through MGNREGS, cumulative 2014-15	75826

Source: District Hand Book, Rayagada, 2011. *District at a Glance-2016

1.3 Objectives

The objective of the Baseline Survey, 2022 was to collect primary data from the millets farming households at the village level on the current practices on cultivation including production, consumption, processing and marketing. It was thought that the collected information would be working as background information for planning and implementing the programme as a whole. The major objectives of the Baseline Survey are:

- To assess the socio-economic condition of the HHs;
- To outline millet production, productivity and package of practices;
- To examine the consumption pattern of millets and
- To elucidate the method of processing and mode of marketing.

1.4 Methodology

1.4.1 Universe and Sample Design

The Government of Odisha's Department of Agriculture and Farmers Empowerment introduced the "Special Programme for Promotion of Millets in Odisha" in 17 additional districts, including Rayagada. Therefore, to undertake Baseline Survey 2022, Phase VI in the Rayagada district one block, i.e., Kolnara Block was selected from the district as part of the programme. The survey included potential millet farming households as the responded households from the block, selected in consultation with local farmers, NGOs, CSOs, being engaged as the Facilitating Agencies (FAs) and the District Agriculture Office (DAO), Government of Odisha.

From the list provided by the SAA Programme Secretariat, there were 728 beneficiary households in 59 villages under 10 Gram Panchayats covering 1 block in the Rayagada district. The block was selected purposively as programme is going to be implemented. Out of these, two Gram Panchayats were randomly selected from the block in the second stage sampling; further two villages were selected from each selected Gram Panchayats in the third stage sampling. In the fourth stage of sampling, 20 households were randomly selected from each selected village, resulting in 80 households surveyed from each block. The Baseline Survey for 2022 under Phase VI included a total of 80 households from the program households across the Block of Rayagada district. Along with household interviews, one focused group discussion (FDGs) was conducted from each village.

Table 1.2: Sample HHs covered under the Baseline Survey in Rayagada District			
Blocks	Programme Households (No)	Surveyed Households (No)	HHs Covered under the study (%)
Kolnara	728	80	10.98

Sources: Facilitating Agency and the Baseline Survey, 2022

1.4.2 Data Collection, Compilation and Analysis

A total of four villages were selected from the block, where two Gram Panchayats for data collection from the Rayagada district for the Baseline Survey of 2022, Phase VI. These villages were selected using the simple random sampling method based on data provided by the implementing agency, WASSAN, about the prospective villages to be included under Phase VI. Two Gram Panchayats were randomly selected from each block, and two villages were further selected from each of these Panchayats.

This comprehensive baseline survey report is based on both secondary and primary data. Primary data was collected by utilizing a pre-tested interview schedule (Annexure 1) and Focus Group Discussions (Annexure 2) with respondents from the concerned districts. Additionally, secondary data on geographical information, population, agriculture, education, irrigation, forest, and institutions was collected from various published and unpublished sources, including the 2011 Census.

To supplement and complement the findings made under the Baseline Survey, Focus Group Discussions were conducted in each selected village. The FGDs were conducted with the local community members and other stakeholders to gather more information and insights about the socio-economic conditions and development issues of the villages. This qualitative data helped in providing a more holistic understanding of the local context, which was further used to triangulate and validate the findings of the quantitative data collected through the survey.

The Baseline Survey aimed to collect data on various socio-economic indicators such as household demographics, income, livelihoods, education, and data on production, consumption, processing and marketing of millets. Besides these, the other indicators on production, consumption processing and marketing of millets at household level are also collected through structured schedules. The findings of the survey and FGDs were analyzed using appropriate statistical tools and techniques to generate a comprehensive report. The report provides an in-depth analysis of the current situation in the selected villages and serves as a Reference point to measure the progress made during the implementation of various development interventions in the future. It also highlights the gaps and challenges in the existing systems and infrastructure

1.5 Limitations of the Study

The present Baseline Survey focuses solely on one block of the Rayagada District. However, due to the onset of the harvesting season, coupled with both in and out-migration, some household heads and female respondents were found to be absent during the data collection process. Despite these challenges, it is important to acknowledge the limitations of the present study.

Firstly, due to logistical reasons and other difficulties, such as the non-availability of respondents, the study was limited to a random sample of 80 households. Secondly, there is the possibility of recall error, especially in cases involving the actual quantity of consumption and marketing, among others. Lastly, in some instances, surveyed households, particularly non-participant farmer households, consumed millets without producing them. This was made possible by past stock and acquiring of millets through exchange and barter. Unfortunately, these details were not captured during the survey. It is essential to consider these limitations while interpreting the findings of the survey. Future studies can address these gaps and improve the accuracy of the data collection process. Despite these limitations, the present

survey provides valuable insights into the socio-economic conditions of the selected households and serves as a baseline to measure the progress made in the future

1.6 Chapters

This Baseline Survey Report has been divided into five Chapters including the current Introductory Chapter I, which provided a District Profile, Objectives, Methodology and Limitations. Chapter II provides the Socio-Economic Profile of Surveyed Households. Chapter III provides details on the Production and Productivity of Millets. Chapter IV discusses the Consumption Pattern of Millets. Chapter V elucidates the processing and marketing of millets.

Chapter II

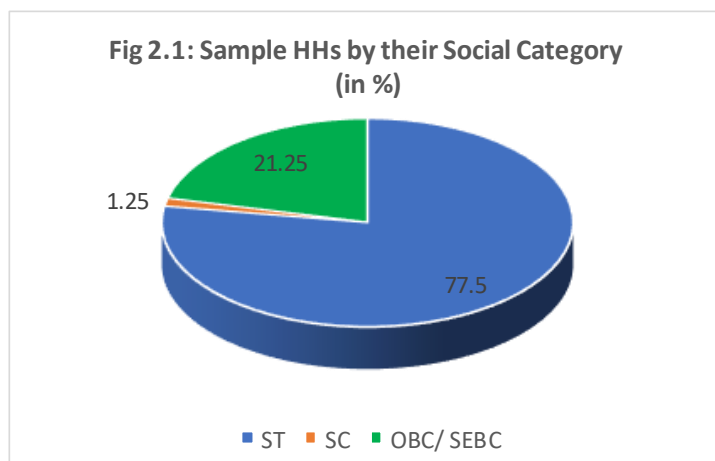
SOCIAL AND ECONOMIC PROFILE

2.1 Introduction

A socio-economic profile is regarded as one of the most important indicators on household expenditure and income as well as other data on the status of housing, individual and household characteristics and living conditions. This Chapter looks into the social and demographic profile of HHs surveyed through their distribution by social group, religion, and gender. The Chapter provides information on the distribution of respondents by poverty status (proportion below and above poverty line), distribution by economic activities and distribution by house structure

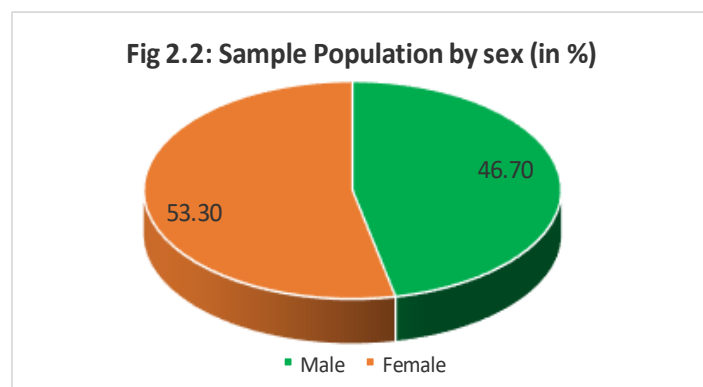
2.2 Social Category

In the Kolnara block of Rayagada District, as illustrated in Figure 2.1, the majority of surveyed households belong to the Scheduled Tribe (ST) category, comprising 62 households, which account for 77.50 per cent of the total. The second largest group is the Other Backward Classes/Socially and Educationally Backward Classes (OBC/SEBC), representing 17 households, or 21.25 per cent. Finally, the Scheduled Caste (SC) group is the smallest, with just 1 household, making up approximately 1.25 per cent of the respondents in the surveyed block.



2.3 Sex

The sex composition of the surveyed population reveals that out of the total 469 Nos sample population, females constitute a large proportion, numbering 250 (53.30 per cent), while males constitute 219 (46.70 per cent) (Fig 2.2).



2.4 Age Group

Table 2.1 presents the distribution of the sample population across different age groups in Kolnara block. The highest proportion of the population falls within the adult's age group, comprising 42.64 per cent of the total population. This is followed by the adolescent age group at 16.63 per cent and the middle age group at 15.35 per cent. The younger age groups such as Infants (4.05 per cent), pre-school children (5.33 per cent), and children (8.10 per cent) together account for a smaller share. The Old Age group constitutes 7.89 per cent of the total population.

Table 2.1: Distribution of Sample Population by their Age Group			
Block	Age Group	No	%
Kolnara	Infant (0-2 years)	19	4.05
	Pre-school (3-5 years)	25	5.33
	Children (6-12 Years)	38	8.10
	Adolescent (13-18 Years)	78	16.63
	Adults (19-44 Years)	200	42.64
	Middle Age (45-59 Years)	72	15.35
	Old age (60 years and above)	37	7.89
Total		469	100

Source: Baseline Survey, 2022

2.5 Education

Table 2.2 presents the distribution of the sample population by their educational status in Kolnara block. The data shows that a large portion of the population, 152 individuals (35.1 per cent), are illiterate, which indicates major educational challenges in the area. On the other hand, 140 individuals (32.33 per cent) have studied up to the higher secondary level, forming the second largest group. About 75 individuals (17.32 per cent) have completed education up to class 10, while only 8 individuals (1.85 per cent) have studied up to the primary level (class 5). In terms of higher education, 33 individuals (7.62 per cent) have completed graduation, and 20 individuals (4.62 per cent) hold postgraduate qualifications. A small group of 5 individuals (1.16 per cent) fall under the "others" category, which include vocational or technical training.

Table 2.2 : Distribution of Sample Population by Education status			
Block	Particulars	No	%
Kolnara	Illiterate	152	35.1
	up to 5 th	8	1.85
	6 th to 10 th	75	17.32
	Higher Secondary	140	32.33
	Graduation	33	7.62
	Post-Graduate	20	4.62
	Others	5	1.16
Total		433	100

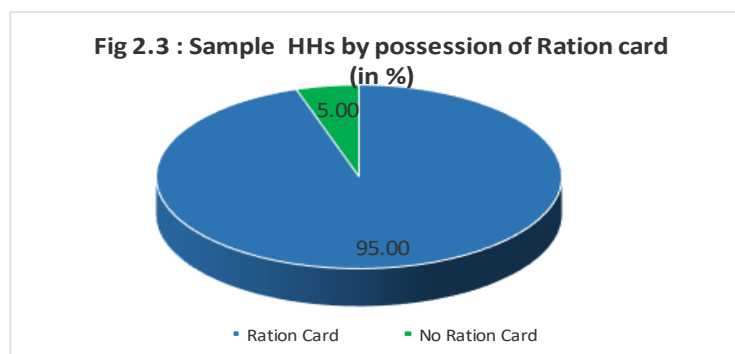
Source: Baseline Survey, 2022

2.6 Religion

Religion plays a significant role in shaping the socio- cultural environment of rural Community. This baseline survey revealed that all the sample HHs belong to Hindu religion.

2.7 Ration card

Figure 2.3 shows the distribution of respondent households in Kolnara block of Rayagada district based on possession of ration card. Out of a total of 80 respondent households, 76 HHs (95.00 per cent) are availing ration cards and only 4 households (5.00 per cent) do not possess ration cards.



2.8 Occupation

Table 2.3 presents the occupational distribution of the sample population in Kolnara block of Rayagada district. Out of a total population of 469 individuals, 376 belong to the working-age group. Agriculture is the most common occupation, engaging 182 persons (48.40 per cent), artisan activities are the second most common occupation, involving 102 persons (27.12 per cent), Wage earning accounts for 19 persons (5.05 per cent), while 4 persons (1.06 per cent) are engaged in business activities. Employment in the government sector (3.19 per cent), whereas private sector employment is reported by (.26 per cent) of individuals. Dairy, poultry, and goat farming are practiced by a very small (0.27 per cent), 32 housewives (8.51 per cent) and 23 unemployed individuals (6.12 per cent).

Table 2.3: Distribution of Sample Population by Occupation			
Block	Occupations	No	%
Kolnara	Agriculture	182	48.4
	Wage earning	19	5.05
	Dairy/ Poultry/ Goat farming	1	0.27
	Business	4	1.06
	Govt. sector	12	3.19
	Private sector	1	.26
	Artisan	102	27.12
	Housewife	32	8.51
	Unemployed	23	6.12
Total		376	100

Source: Baseline Survey, 2022

2.9 Annual Income

Table 2.4 shows the distribution of sample households by their annual income in Kolnara block. The data indicates that most households fall in the lower-income groups. About 34 HHs (42.50 per cent) earn between Rs. 40,001 and Rs. 80,000 annually, which is the largest group. Another 21 HHs (26.25

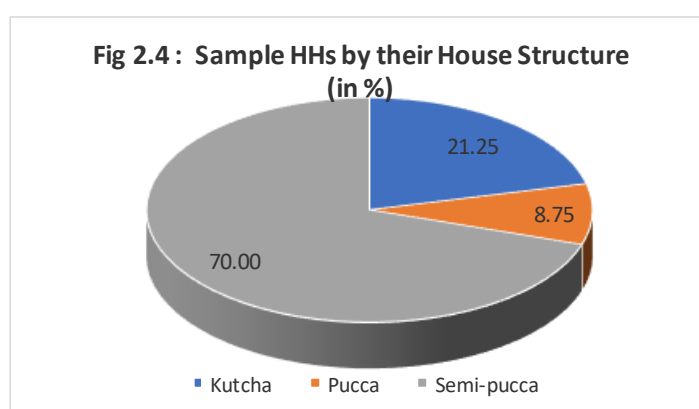
per cent) earn up to Rs. 40,000, 11 HHs (13.75 per cent) in the income range of Rs.80,001 to Rs. 1,20,000, and 9 HHs (11.25 per cent) earn between Rs. 1,20,001 and Rs. 1,60,000. Only a very small share, 1 HH (1.25 per cent) has reported income between Rs. 1,60,001 and Rs. 2,00,000, while 4 HHs (5.00 per cent) have income above Rs. 2,00,000.

Table 2.4: Distribution of Sample HHs by their Annual income												
Block	Up to Rs.40000/-		Rs. 40001/- to Rs.80000/-		Rs. 80001/- to Rs.120000/-		Rs.120001/- to Rs.160000/-		Rs. 160000/- to Rs.200000/-		Above Rs.200000/-	
	N	%	N	%	N	%	N	%	N	%	N	%
Kolnara	21	26.25	34	42.50	11	13.75	9	11.25	1	1.25	4	5.00

Source: Baseline Survey, 2022

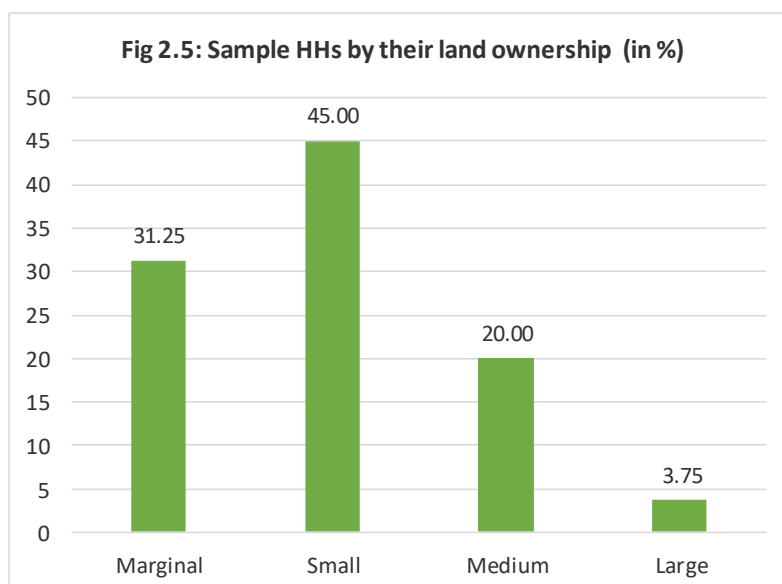
2.10 House Structure

Fig 2.4 presents that Kolnara block in Rayagada District out of the total 80 sample HHs, 56 HHs (70.00 per cent) are found to be having Semi-Pucca houses. In this regard, the second highest number is 17 HHs (21.25 per cent) those have Kutcha houses and the remaining 7 HHs (8.75 per cent) have Pucca Houses.



2.11 Land ownership

The Fig 2.5 presents the land ownership among the survey HHs in Kolnara Block of Rayagada district. All the sample HHs have own agricultural land. Out of the total sample of HHs, 3 HHs (3.75 per cent) are large farmers and no one is landless. It is found that, 36 HHs (45.00 per cent) are small farmers and followed by 25 HHs (31.25 per cent) are marginal farmers. The remaining 16 HHs (20.00 per cent) are medium farmer HHs.



2.12 Conclusion

This chapter presented a comprehensive overview of the socio and economic characteristics of the surveyed households in Kolnara block of Rayagada District. The analysis reveals that the majority of the population belongs to the Scheduled Tribe category, with females slightly outnumbering males. All the Sample HHs are Hindus. A significant proportion of the population remains illiterate, though a considerable number have completed higher secondary education. The age distribution indicates a predominance of the adult population, while the elderly and young children form smaller proportions. Economically, agriculture remains the primary occupation, People are also engaged in artisan work and wage labour, highlighting a dependence on traditional and informal sectors. The income data further emphasizes the prevalence of low-income households, with over two-thirds earning less than ₹80,000 annually. Most households live in semi-pucca structures and possess some agricultural land, with a notable proportion being small or marginal farmers.

Chapter III

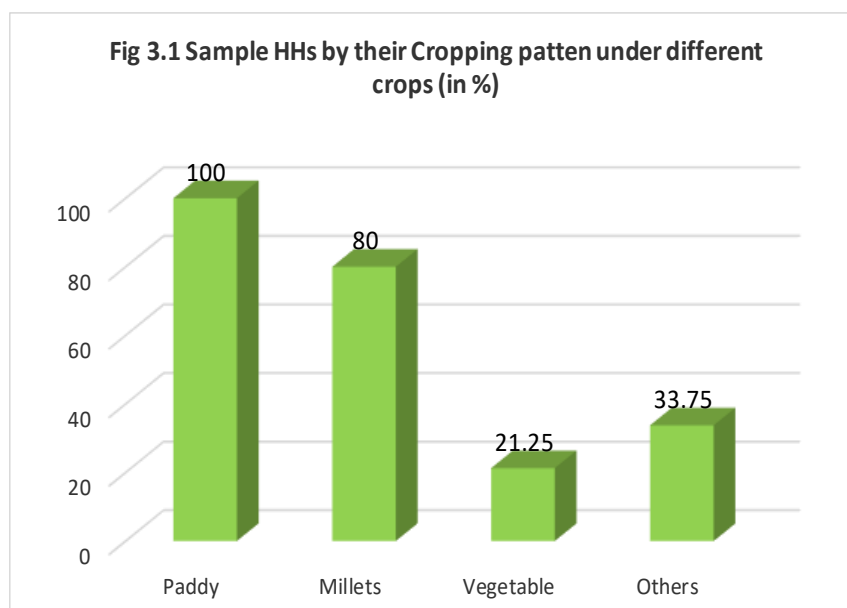
PRODUCTION OF MILLETS

3.1 Introduction

Millets have been an integral part of India's agrarian economy for centuries, serving as a staple food for millions, particularly in semi-arid and rainfed regions. These small-seeded cereals, including varieties such as finger millet (ragi), pearl millet (bajra), foxtail millet, little millet, kodo millet, and proso millet, are valued for their high nutritional content, drought tolerance, and low input requirements. The production of millets plays a crucial role in ensuring food security, improving soil health, and sustaining rural livelihoods. This chapter focuses on the production aspects of millets, analysing trends in area, yield, and total output over the years. It also explores factors influencing production such as rainfall patterns, soil fertility, adoption of improved seed varieties, and government interventions. Special attention is given to the role of small and marginal farmers, who constitute the backbone of millet production in rural areas. Understanding these production dynamics is essential for formulating strategies to revive millet cultivation and promote their inclusion in the mainstream food system.

3.2 Cropping Pattern

Figure 3.1 presents the distribution sample households by their cropping Pattern under Different Crops. It shows that, all the 80 sample HHs are cultivating paddy along with other crops; about 64 HHs (80 per cent) of them cultivate millets, 17 HHs (21.25 per cent) cultivate vegetables and 27 HHs (33.75 per cent) of them are cultivating other crops such as, maize, sunflower, cashew, and lemon (Fig.3.1).



3.3 Area, Production, and Yield of Millets

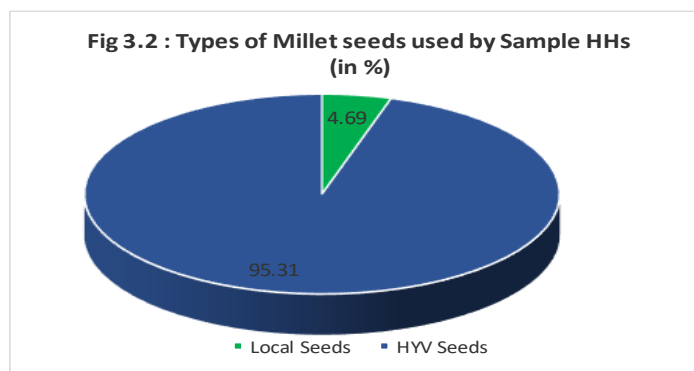
Table 3.1 presents information about millet cultivation by sample households. It focuses on the area used, quantity produced, and yield per acre. About 64 HHs (80 per cent) are cultivating Millets. The total area used for millets cultivation is 106.1 acres, and the total production of Millets is 345 quintals (Qtls). The average yield of millets is 3.25 quintals per acre. The yield of millets is 3.25 Qtls.

Table 3.1: Area, Production, and Yield of Millets						
Block	Millet Type	No. of HHs	%	Area in acre.	Production (in Qtls.)	Yield Qtls/ac
Kolnara	Ragi	64	80	106.1	345.00	3.25

Source: Baseline Survey, 2022

3.4 Type of Millet Seeds used

Fig. 3.2 presents the distribution of respondents based on the type of seeds they have used for millets cultivation. Out of the total 64 HHs, 61 HHs (95.31 per cent) use High-Yielding Variety (HYV) seeds to achieve better production. In contrast, only 3 households (4.69 per cent) rely on local seeds.



3.5 Perception on Quality of Millet Seeds

The perception of farmers regarding the quality of millet seeds in Kolnara block is largely positive. As shown in Table 3.2, a significant majority of respondents, 61 households (95.31 per cent), are perceived the quality of millet seeds as Good. Only 3 households (4.69 per cent) expressed their dissatisfaction, considering the seed quality as Bad.

Table 3.2 Distribution of Sample HHs by their Perception on Quality of Millet Seeds						
Blocks	Good		Bad		Total	
	No	%	No	%	No	%
Kolnara	61	95.31	3	4.69	64	100

Source: Baseline Survey, 2022

3.7 Package of Practices

Table 3.3 shows that the package of practices, majority of millet farmers' practice Line sowing (LS) method 41 HHs (64.06 per cent), 14 HHs (21.88 per cent) practice the Broadcasting method of

Table 3.3: Distribution of Sample HHs by their Package of Practices use for Millets cultivation			
Block	Methods	No	%
Kolnara	LT Method	9	14.06
	LS Method	41	64.06
	Broadcasting Method	14	21.88
Total		64	100

Source: Baseline Survey, 2022

cultivation, 9 HHs (14.06 per cent) practice the Line Transplantation (LT) method of cultivation. No sample HHs practice the System of Millets Intensification (SMI) method of cultivation. Thus, most millet farmers practice the Line Sowing (LS) method of cultivation in Kolnara.

3.8 Fertilizer and Pesticides used

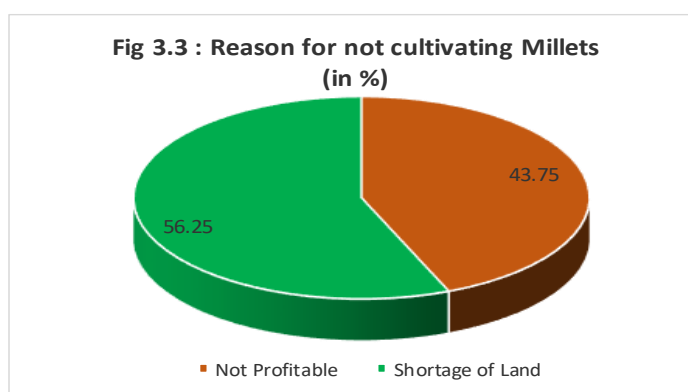
Table 3.4 presents the distribution of households based on the type of fertilizers used in the study area. A large majority, 52 HHs (81.25 per cent), rely on organic manure. The use of chemical pesticides is reported by only 4 HHs (6.25 per cent), while chemical manure is used by just 1 HH (1.56 per cent) and 7 HHs (10.94 per cent) have reported not using any type of fertilizer.

Table 3.4: Distribution of Sample HHs by Fertilizer and Pesticides used			
Block	Manure/ Fertilizer/ Pesticides	No	%
Kolnara	Organic manure	52	81.25
	Chemical manure	1	1.56
	Chemical pesticide	4	6.25
	Do not use	7	10.94
Total		64	100

Source: Baseline Survey, 2022

3.8 Reason for not Cultivating Millets

Fig 3.3 indicates that 16 people are not cultivating millets due to various reasons. Out of them 7 HHS (43.75 per cent) not cultivating millet in the study area because the crop is not profitable as compared to the other crops and 9 HHs (56.25 per cent) are not cultivating it as they do not possess adequate of land



3.9 Conclusion

This chapter examined the current status of millet cultivation in Kolnara block of Rayagada District. The findings reveal that millet farming is predominantly practiced by ST households. The yield of millets in the study area is recorded at 3.25 quintals per acre High Yielding Variety (HYV) seeds are widely used and well-regarded by farmers, though a few households refrain from millet cultivation due to land constraints and perceived low profitability. The Line Sowing method is the most commonly adopted cultivation practice, while the use of the System of Millet Intensification (SMI) remains absent. Organic manure is the primary input used, with minimal reliance on chemical fertilizers and pesticides. Overall, the chapter highlights the potential for improving millet productivity through increased awareness, better access to quality inputs, and promotion of improved agricultural practices.

Chapter IV

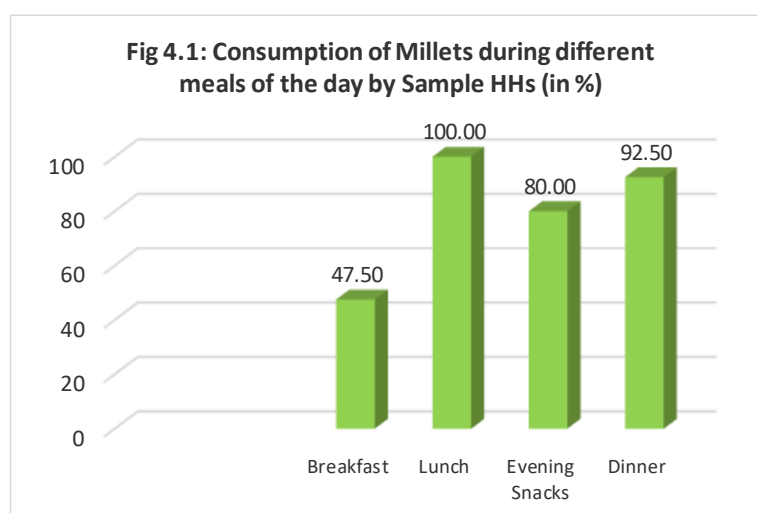
CONSUMPTION OF MILLETS

4.1 Introduction

Millet's production, consumption and marketing are interrelated and depend on one another. Demand for production of millets largely depended on the consumption of various millets-based recipes by all age groups throughout the day. In the earlier chapters, production practices by the millets farming respondent HHs have been discussed. Based on the findings of the Baseline Study conducted in Rayagada District, this Chapter analyses the consumption pattern of millets in different seasons, at different times in a day. Moreover, nutritional and other health benefits from the millet-based recipes determine its consumption at large.

4.2 Consumption of Millets during different Meals of the Day and across Seasons

Fig. 4.1 reveals that 38 HHs (47.50 per cent) consume millet-based recipes during breakfast, followed by 80 HHs (100 per cent) at lunch, 74 HHs (92.50 per cent) at dinner, and 64 HHs (80.00 per cent) during evening snacks. Moreover, baseline data show that the respondent households consume an average of 67.02 kg of millets per household per year. It is also observed that all sample households consume millets across all seasons, i.e., summer, monsoon, and winter seasons.



4.3 Millet Recipes Consumed

Table 4.1 presents the distribution of sample households in Kolnara block by their consumption of different millet-based recipes. The data shows that *Jau/Torani* is the most widely consumed recipe, with all 80 HHs (100 per cent) reporting its use, highlighting its popularity and cultural importance in the local diet. This is followed by *Tampo/ Pitha*, consumed by 69 HHs (86.25 per cent), indicating that it is another major traditional preparation. About 7 HHs (8.75 per cent) consume *Idli/Upma*, while 5 HHs (6.25 per cent) also consume other Millets based recipes'. Sweet items are prepared by 4 HHs (5.00 per cent), and *Khiri* is consumed by 2 HHs (2.5 per cent). Very limited consumption is recorded for *Chhatua* and *Lassi/Sarbat*, with only 1 HH (1.25 per cent).

Table 4.1: Distribution of Sample HHs by Consumption of different Millet Recipes			
Block	Millet Recipes	N	%
Kolnara	Tampo/ Pitha	69	86.25
	Chhatua	1	1.25
	Jau/ Torani	80	100
	Khiri	2	2.5
	Idli/ Upma	7	8.75
	Sweet item	4	5.00
	Lassi/ Sarbat	1	1.25
	Others	5	6.25
Total		80	100

Source: Baseline Survey, 2022

4.4 Consumption of Millets by different Age Groups

Table 4.2 presents the distribution of millet consumption among the sample population across different age groups in Kolnara block. The data reveals that millet consumption is very high across all age categories, excluding infants (0-2 years) i.e. 19 children in this group not consume millets, with an overall consumption rate of 95.73 percent. However, complete consumption (100 percent) among pre-school children (3–5 years), children (6–12 years), adolescents (13–18 years), adults (19–44 years), and the elderly (60 years and above). Among of the middle-aged adults (45–59 years), 98.61 percent consume millets.

Table 4.2: Distribution of the Sample Population by Consumption of Millets in different Age Groups				
Block	Age Groups			
		Total	Consuming	%
Kolnara	Infant (0-2 years)	19	0	0.00
	Pre-School (3-5 years)	25	25	100
	Children (6-12 Years)	38	38	100
	Adolescent (13-18 Years)	78	78	100
	Adult (19-44 Years)	200	200	100
	Middle age Adult (45-59 Years)	72	71	98.61
	Old Age (60 years and above)	37	37	100
Total		469	449	95.73

Source: Baseline Survey, 2022

4.5 Conclusion

The survey findings reveal that in Kolnara Block of Rayagada district, millets are consumed by all the respondent HHs throughout the year. Millet-based recipes are consumed in different meals of the day, Jau/Torani and Tampo/Pitha being the most preferred recipes. Consumption patterns also indicate that millets are widely accepted by all age groups, except for infants, high adoption shown among children, adolescents, adults, and the elderly. The overall consumption rate of 95.73 percent reflects the importance of Millets in the dietary pattern of the local people.

Chapter V

PROCESSING AND MARKETING OF MILLETS

5.1 Introduction

Marketing millets as well as all millets varieties-based products largely depends on the extent of millets produced in the locality and other accessible places in the entire State. This Chapter discusses the various methods being adopted by the respondents on millet farming and non-farming also HHs in processing, availability and the distance covered by the households to reach the processing and milling units. It discussed the various modes of marketing as well as the exact trend in utilization of millets by the sample respondent HHs.

5.2 Processing of Millets

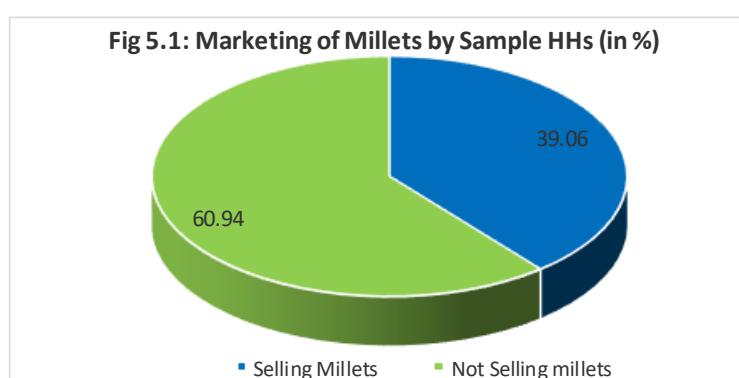
Table 5.1 presents that the sample millets cultivating HHs usually use both types of processing methods, 45 HHs (71.42 per cent) use traditional method i.e. locally available Chaki or stone crusher and the others are through machines 17 HHs (26.98 per cent). 1 HH (1.59 per cent) are preferred both traditional and machinery methods for millets processing. It is found that among of the total 64 millet cultivating sample HHs, 63 HHs processing millets and 1 HH not processing Millets.

Table 5.1 Distribution of the Sample HHs by Method of Millet Processing								
Block	Millet cultivating HHs	Total HHs Processing Millets	Followed Traditional Method		Used Machine to Process		Used Both the Methods	
	No	No	No	%	No	%	No	%
Kolnara	64	63	45	71.42	17	26.98	1	1.59

Source: Baseline Survey, 20223

5.3 Marketing of Millets

Fig 5.1 presents that among of the total millet farming respondent HHs in Kolnara block, 25 HHs (39.06 per cent) sell their millets while the remaining 39 HHs (60.94 per cent) consumed their product throughout the year.



5.4 Mode of Selling Millets

Table 5.2 shows that out of 64 millets cultivating sample HHs, 25 HHs (39.06 per cent) sale their millets to Local vendor, the Middle Man, local Weekly Market (Haat), to the Money Lender or to the Govt etc.

2 HHs (8.00 per cent) HHs sells their millets in daily market/ Haat, 4 HHs (16.00 per cent) to Money lenders/ Sahukar, 10 HHs (40.00 per cent) to middlemen and 8 HHs (32.00 per cent) in mandi.

Table 5.2 Distribution of Sample HHs by Mode of Selling Millets							
Block	Selling Points	Within the village		Outside the village		Total	
		No	%	No	%	No	%
Kolnara	Mandi	0	0	8	32.00	8	32.00
	Middle-men	0	0	10	40.00	10	40.00
	Money Lender/ Sahukar	4	16.00	0	0.00	4	16.00
	Daily Market/ Haat	0	0	2	8.00	2	8.00
	Other	1	4.00	0	0	1	4.00
	Total	5	20.00	20	80.00	25	100

Source: Baseline Survey, 2022

5.4 Conclusion

During the Baseline Survey it is found that most households are involved in millet processing, with traditional methods being more common than mechanized ones. Marketing of millets, however, remains limited as many households consume their produce rather than selling it. Those who do sell often depend on informal channels such as middlemen and moneylenders, while only a few accesses formal markets like government mandis. Overall, millet processing and marketing are still underdeveloped, indicating the need for better infrastructure and stronger market linkages to benefit farming households.

Annexure 1: Baseline Survey Data of Rayagada District Phase, VI 2022

SI No	Indicators	Unit	Total
1	Percentage of Sample households Cultivating Millets (64 HHs)	%	80
2	Types of Millets Cultivated (2021)		
	Finger Millet	%	80
3	Total Area under Millets Cultivation	Acre	106.1
4	Average millets cultivated area	%	25.03
5	Total Production of Millets	Qnt.	345.00
6	Yield of Millets (Qnt./Acre)		3.25
7	Percentage of HHs use Package of Practice (64 HHs)		
	Broadcasting	%	21.88
	LS	%	64.06
	LT	%	14.06
8	Percentage of HHs Consume Millets (80 HHs)	%	
	Breakfast	%	47.50
	Lunch	%	100
	Evening Snacks	%	80.00
	Dinner	%	92.50
9	Percentage of HHs Consume Millets Recipes (80 HHs)		
	Tampo/Pitha	%	86.25
	Jau/Torani	%	100
	Khiri	%	2.5
	Lassi/ Sarbat	%	1.25
	Chhatua	%	1.25
10	Percentage of HHs use different Methods for Processing Millets (63 HHs)		
	Manually	%	71.42
	Machines	%	26.98
	Both	%	1.59
11	Percentage of HHs Selling Millets/Ragi (25 HHs)		
	Mandi	%	32.00
	Daily Market/ Haat	%	8.00
	Middleman	%	40.00
	Sahukar/Moneylenders	%	16.00

Annexure 2

Confidential and to Be Used for Research Purpose Only

Households Schedule for Baseline Survey 2022-23, Phase VI of SHREE ANNA ABHIYAN (SAA)

Serial No.....

Date.....



Part-I: Socio-Economic Status

1. Profile of the Households

1.1. Name of the Households' Head:

1.2. Name of the Respondent:

1.3. Name of the (i) Village:

(ii) GP

(iii) Blocks:

(iv) District:

1.4. Category: (i) SC (ii) ST (iii) OBC/SEBC (iv) Others (specify)

1.5. Religion (i) Hindu (ii) Muslim (iii) Christian (iv) Animism (v) Others

1.6. Ration Card Holding: (i) Ration Card (ii) Antyodaya Card (iii) Other (iv) No Card

1.7. Type of Family: (i) Nuclear (ii) Joint (iii) Extended (iv) Others (specify)

1.8. House Structure: (i) Katcha (ii) Semi-Pucca (iii) Pucca

3. HHs' Land ownership in Acre:.....

Sl No.	Name of the Crops	Yes/ No	Own Land*	Leased-in*	Sl. No.	Name of the Crops	Yes/ No	Own Land*	Leased-in*
a	Paddy				C	Vegetables			
b	Millets				D	Any Others Crops			
Total Operational Holding									

4. Operational Holdings Under Different Crops (in Acre)

Sl. No	Source	Expenditure Heads						Total Amount (in Rs.)
	Agriculture	Land Preparation	Transplantation/ Sowing	Weeding	Fertilizers/ Pesticides	Harvesting	Others	
1	a) Millet							
	b) Paddy							
	c) Vegetables							
	d) Any Other Crops (Specify)							
3	Households Expenses							
4	Other HH Expenses							
	Total							

5. Annual Expenditure:

6. Annual income of the HH (last year.....)

7. Have you taken any agricultural loan?

1-Yes 2-No If yes, please provide details.....

Household Particulars:

2. Household Particulars

Sl. No	Name of the HH Members	Relationship with HoH (Use Code)	Age	Sex	Marital Status (Use Code)	Educational Qualification (Use Code)	Main		Subsidiary		Consume Millet (Yes/No)
							Occupation (Use Code)	Annual Income	Occupation (Use Code)	Annual Income	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Codes: Marital Status: 1- Married, 2- Unmarried, 3- Widow, 4- Widower, 5- Divorced, 6- Separated, 7- Any Others (pl specify)

Relationship: 1-Self, 2- Spouse, 3- Son, 4- Daughter, 5- Daughter-in-Law, 6- Son-in-Law, 7- Father, 8-Mother, 9-Brother, 10-Sister, 11- Grandson, 12- Granddaughter, 13- Father- in-Law, 14- Mother-in-Law, 15- Any Other (Specify)

Education: 1- Illiterate, 2- Up to Class 5, 3- Class 6-10, 4- Higher Secondary, 5- Graduate, 6- Post-Graduate, 7- Technical (Diploma/Degree), 8- Professional/Management, 9- Any Other (Specify)

Occupation: 1- Agriculture, 2- Daily Wage Labour, 3- Business/Entrepreneurship, 4- Govt sector, 5- Private Sector, 6- Pension/Remittances 7- Student 8- Housewife, 9- Unemployed, 10- Others (pl. specify)

Part-II: Production of Millets

8. Do you cultivate millets?

1-Yes 2-No

If yes, give millet-wise production details

Sl. No.	Millet Crops	Season	Area (in Acre)	Land Type Used	Sources of Irrigation	Type of Seed Used	Source of Seed	Quality of Seeds	Method of Cultivation	Use of Fertilizer	Use of Pesticides	Production (Qnt.)	Kept for Seed (Qnt.)	Kept for Consumption (Qnt.)	For Marketing (Qnt.)
a	Mandia	Kharif													
		Rabi													
		Summer													
b	Suan/Kosla/Gurji	Kharif													
		Rabi													
		Summer													
c	Koda	Kharif													
		Rabi													
		Summer													
d	Any other (specify)	Kharif													
		Rabi													
		Summer													

Land Type Used: 1-Upperland, 2-Slope Land, 3-Middle Land, 4-Low Land.

Sources of Irrigation: 1. Rain, 2. Farm Pond, 3- Stream, 4- MIP/WS, 5-River, 6- Canal, 7- Bore well, 8-Others(Specify).

Type of Seed Used: 1-Local, 2- Certified, 3-HYV. Source of Seeds: 1-Own Seed, 2- Relatives, 3-Market, 4- NGO, 5- Govt./ Community Seed Centre, 6-Others (pl. specify)

Quality of Seeds: 1. Good, 2. Average, 3. Bad

Method of Cultivation: 1) SMI- System of Millets Intensification, 2) LT- Line Transplantation, 3) LS- Line Showing, 4) Broadcasting, 5) Others (specify)

Use of Fertilizer: 1) Organic Manure, 2) Chemical Fertilizers, 3) Both, 4) No Use. Pest Control: 1) Bio-Pesticides, 2) Chemical Pesticides, 3) Both, 4) No Use

9. Whether you follow mixed farming or mono farming system? **1. Mixed 2. Mono**
If mixed, with which are the crops(s)?
10. How do you store your seed and grain?
(i) Jute Bag (ii) Earthen Pot (iii) Bamboo Basket (iv) Pura (paddy rope)
(v) Open Hanging (vi) Other (Specify)
11. Had your seed or grain got damaged during last year? **1. Yes 2. No**
12. Have you done weeding for the millets cultivation? **1. Yes 2. No**
13. If Yes, Number of times you do weeding in your millet fields, by each method?
1) Manually_____ 2) By Weeder_____ 3) Both_____
14. If By Weeder, Sources of weeder?
i) Own ii) Rental iii) Borrowed from Neighbours iv) Govt. Provided v) Other
15. If HH is not cultivating any of the millets, what is the reason?
(i) Not profitable (ii) Shortage of land (iii) Non-availability of Seeds
(iv) Lack of Irrigation (v) Others (pl. specify)
16. How many years have you not cultivated Millets?
17. Do you like to cultivate Millets under this programme? **1. Yes 2. No**

Part-III: Consumption of Millets

18. Does your households consume millets? **1. Yes 2. No**
If Yes, Types of millets your HH consumed in different seasons (Put Tick Mark)

Sl. No.	Name of the Millets	Winter				Summer				Rainy			
	Times	Breakfast	Lunch	Evening Snacks	Dinner	Breakfast	Lunch	Evening Snacks	Dinner	Breakfast	Lunch	Evening Snacks	Dinner
a	Mandia												
b	Suan/ Kosla / Gurji												
c	Koda												
d	Any Other Millets (Specify)												

19. **Millet Requirements of the HH:**

Sl. No.	Seasons	Millets Consumed (in Kg.)	Total Requirement of Millets (Kg.)	Sources of Millet Consumed by HH (in Kg)				Total
				Produced	Purchased	Borrowed/ Exchanged	Other Sources	
a	Winter							
b	Summer							
c	Rainy							
d	Total							

20. **Consumption of Millets in different Recipes (Put Tick Mark)**

Sl. No.	Name of The Millets	Pitha/ Tampo	Chhatua	Jau/ Torani	Khiri	Idli/ Upama	Sweets Items	Others (Specify)	Remarks
a	Mandia								
b	Suan/ Kosla/ Gurji								
c	Kodo								
d	Any Other Millets (Specify)								

21. Is there any special occasion when you prepare millets-based items? **1. Yes 2. No**

If yes, what is/are the occasion(s) (specify)? _____

22. For this what type of millet is required (specify)? _____

23. Do you purchase Millet Based Products from market for consumption? **1.Yes 2.No**

24. If yes, what are the millets-based items you usually purchase from the market?

1. Biscuit/Mixture 2. Idli/Upama 3. Chhatua 4. Pakoda 5. Others (Specify)

25. How do you like the taste of millet-based products you purchased from market?

1. Liked it 2. So-so 3. Do not Like it

Part-IV: Processing of Millets

26. Do you process the millet products in your house? **1.Yes 2.No**

27. If yes, who among your family members involved in the processing of millets?

i). Nos. of Male members _____. ii). Nos. of Female members _____

28. How do you process the millets? a) Traditionally b) Machinery c) Both d) Others (Specify)

29. If traditionally, please elaborate the methods of processing.

30. If Machinery, how far is the location of the processing unit from your village? _____km

Sl. No.	Millet Crops	Yes /No	Sources of Millets You Sale	Quantity	Price/ Kg.	Govt. Price (MSP)	Where did you sell your millets	Distance in Km	Mode of Transportation Used for Millets Sale	Reason for Sale
a	Mandia									
b	Suan/ Kosla /Gurji									
c	Koda									
d	Any other (specify)									

Sources of Millets You Sell: 1. Own Produced, 2. Purchase from Farmers, 3. Others (Specify)

Where Sold Your Millets: 1. Govt. *Mandi*, 2. Middlemen/ Local Businessman, 3. Moneylender/ *Sahukar*, 4. Daily market/ Haat 5. Others (pl. specify)

Mode of Transportation: 1. Headload, 2. Cycle, 3. Cart, 4. Own Vehicle, 5. Hired Vehicle, 6. Public Transport, 7. Others (Specify)

Reason for Sale: 1. Better Price, 2. Immediate Need of Cash, 3. Loan Repayment, 4. Non-Availability of Market, 5. Any Others (specify)

Part-V: Marketing of Millets

31. Do you sell millets?

1. Yes 2. No

32. Types of Millets, you Sell and Quantity

33. Any instance of distress sale (less than the market price) of Millets? **1.Yes 2.No**

34. If yes, what is the sale price.....and what is the market price.....

35. What are the marketing processes followed by you? a) Barter b) Money c) Others (specify)

36. Do you sell any millet based value-added products? **1.Yes 2.No**

37. If yes, provide the details about the Millet Based Value Added Products you sale.

38. Remarks

Contact no of Respondent

Signature of the Researcher/Field Investigator

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About NCDS, Bhubaneswar

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