

BASELINE SURVEY: PHASE VI

BOUDH 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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ନବକୃଷ୍ଣ ଚୌଧୁରୀ ଉନ୍ନୟନ ଗବେଷଣା କେନ୍ଦ୍ର
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FOREWORD

It is with great pleasure that I extend my warmest greetings to you through this foreword letter, reflecting on the remarkable journey of the “Special Programme for Promotion of Millets in Odisha,” fondly referred to as the Shree Anna Abhiyan or SAA. The roots of the SAA delve deep into a significant consultation meeting convened on 27th January 2016 at the Nabakrushna Choudhury Centre for Development Studies (NCDS). Chaired by Mr. R. Balakrishnan, the then Development Commissioner-cum-Additional Chief Secretary (DC-cum-ACS) of the Government of Odisha and Chairperson, NCDS, this gathering brought together a diverse array of stakeholders. Representatives from various line departments of the Government of Odisha, esteemed members of civil society groups from across the nation and within the state, including notable organizations like the Alliance for Sustainable and Holistic Agriculture (ASHA), the Millets Network of India (MINI), and the Revitalizing Rain-fed Agriculture (RRA) Network of India, graced the occasion. Distinguished figures from academia, such as Dr. T. Prakash, the then Chairperson of the Karnataka Agricultural Price Commission, lent their expertise to the discourse.

NCDS took the initiative to submit a proposal to the Government of Odisha, emphasizing the imperative to revive millet production in the state. The resounding impact of this proposal was swiftly acknowledged, evident in the budget speech delivered on 18th March 2016 by the Government of Odisha, which articulated their commitment to reviving millets. This pivotal moment marked the inception of a journey marked by collaboration, dedication, and transformative action. Subsequently, a memorandum of understanding (MoU) was signed on 27th February 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 target blocks of the SAA, especially the Baseline Study 2022, Phase VI. These surveys, designed to evaluate the status of millet production, marketing, consumption, and processing, represent a critical step towards informed intervention and strategic decision-making.

As the Director of NCDS, I extend my heartfelt appreciation to all the members of our dedicated team for their unwavering commitment and tireless efforts in realizing the objectives of the SAA. Your diligence and perseverance have been instrumental in bringing our collective vision to fruition. I extend my deepest gratitude to all our partners, stakeholders, and collaborators for their invaluable support and steadfast dedication to the cause of promoting millets in Odisha, especially completion of the Baseline Survey, 2022. Together, let us continue to forge ahead, leaving an indelible mark on the landscape of sustainable agriculture and rural development.



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 Boudh 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, especially for the smooth completion of the Baseline Study, 2022. 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

Boudh district is one of the 17 districts where the “Special Programme for the Promotion of Millets in Odisha or (hereafter) Shee Anna Abhiyan (SAA)” Phase VI has begun in the Kharif 2021 in its three blocks, namely, Boudh, Harabhanga and Kantamal. Under the Phase VI, for implementing the Shee Anna Abhiyan (SAA) in Boudh district, out of the total population 240 households were selected through the random sampling method and the Baseline Survey 2022, Phase VI, was conducted.

The study revealed that among the surveyed households, 64.58 per cent belonged to Other Backward Classes (OBCs)/ socially and Educationally Backward Classes (SEBCs), 27.50 per cent belonged to STs Category, and 7.92 per cent belonged to Scheduled Castes (SCs). Total population of the 240 sample households is 832, of which 57.69 per cent are male and 42.31 per cent are female with purely dominated by Hindu community and 95.00 per cent possess ration cards.

Significant portions of the population (30.77 per cent) are farmers, followed by students (19.23 per cent), the share of wage labourers is 12.28 per cent, while business owners account for 2.16 per cent. Government employees represent 0.96 per cent and private employees 1.68 per cent. House wives constitute 23.32 per cent, and 4.33 per cent of the sample population in the working age group are found to be unemployed. Out of the total of 240 households, 62 (25.83 per cent) have *semi-Pucca* houses, 131 households (54.58 per cent) have *Kutcha* houses, and 47 households (19.58 per cent) have *Pucca* houses.

As found, from the baseline survey it is found that all the 10 sample households have cultivated millets in the year 2021. Total operational area among the sample households in the three selected blocks of Boudh district is 7.9 acres of land cultivated under millets with the average yield of 2.48 quintals per acre and total production of 19.58 quintals. Moreover, it is also found that out of total sample households only 3.12 per cent were satisfied with their own or local seeds and all the millets farmers adopted Line Transplantation (LT). The data shows that the consumption of millets is highest during the summer season as 4.16 per cent of sample households consume it during this season, while 2.5 per cent consume it during rainy season, and 2.91 per cent in the winter season.

The data indicates that people consume millets during lunch and breakfast about 3.33 and 4.12 per cent respectively of the HH across the blocks. 1.25 per cent during evening snack time. *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*. Out of 240 households, only 4.16 per cent households are processing millets traditionally. Out of the total sample of 240 households, only 2.91 per cent of households sell their millets to middlemen and 2.19 per cent of sample households experienced distress sale.

CONTENTS

<i>Sl.</i>	<i>Title</i>	<i>Page</i>
	<i>Foreword</i>	<i>i</i>
	<i>Acknowledgement</i>	<i>ii</i>
	<i>Executive Summary</i>	<i>iii-iv</i>
	<i>Contents</i>	<i>v</i>
	<i>List of Tables</i>	<i>vi</i>
	<i>List of Figures</i>	<i>vii</i>
	<i>Abbreviations</i>	<i>viii</i>
Chapter I	Introduction	1-6
1.1	Background	1
1.2	District Profile	2
1.3	Objectives	5
1.4	Methodology	5
1.5	Limitations of the study	6
1.6	Chapters	6
Chapter II	Socio-economic Profile	7-12
2.1	Introduction	7
2.2	Social and Demographic Profile	7
2.3	Social Composition	7
2.4	Distribution of Population by Gender	8
2.5	Religious Distribution	8
2.6	Population Distribution by Age Groups	9
2.7	Education Status	9
2.8	Ration card Holding status	10
2.9	House structure	10
2.10	Occupation	10
2.11	Annual Income	11
2.12	Land ownership Pattern	12
2.7	Conclusion	12
Chapter III	Production of Millets	13-15
3.1	Introduction	13
3.2	Cropping pattern of Households	13
3.3	Area, Production and Yield of millets	14
3.4	Perception on Quality of Seeds Used	14
3.5	Types of Millets Seeds Used by Households	14
3.6	Package of Practices	14
3.7	Reasons for not Cultivating Millets	15
3.8	Conclusion	15
Chapter IV	Consumption of Millets	16-17
4.1	Introduction	16
4.2	Millets consumption across seasons	16
4.3	Consumption of Millets during Different Meals of the Day	16
4.4	Consumption of Different Millets Recipes	17
4.5	Conclusion	17
Chapter V	Processing and Marketing of Millets	18
5.1	Introduction	18
5.2	Processing Units	18

5.3	Marketing	18
5.4	Conclusion	18
	<i>Annexure-1: Mapping of the Baseline Survey</i>	19

LIST OF TABLES

<i>Sl.</i>	<i>Title</i>	<i>Page</i>
Table 1.1	Socio-economic and Demographic Features of Boudh District	4
Table 1.2	Distribution of Sample Households in Boudh District	5
Table 2.1	Distribution of Households by Social Groups across Blocks	7
Table 2.2	Distribution of Population by Gender across Blocks	8
Table 2.3	Distribution of Households by ration card holding status	10
Table 2.4	Distribution of Households by House Structure across Blocks	10
Table 2.5	Distribution of Households by economic activities across Blocks	11
Table 3.1	Distribution of Area, Production and Yield of Millets	14
Table 4.1	Distribution of Consumption of Millets across Seasons	16
Table 4.2	Distribution of Millets Consumption during different Meals of the Day	16
Table 4.3	Distribution of HHs Consumed Millet Recipes across Blocks	18

LIST OF FIGURES

Sl.	Title	Page
Fig 1.1	Map of Boudh District with Blocks	3
Fig 2.1	Distribution of Households by Social Categories across blocks	7
Fig 2.2	Distribution of population by Gender	8
Fig 2.3	Distribution of population by age groups	9
Fig 2.4	Distribution of population by their education	9
Fig 3.1	Distribution of HHs by their cultivation of crops	13

ABBREVIATIONS

APL	: Above Poverty Line
BPL	: Below Poverty Line
CBO	: Community Based Organisation
CRP	: Community Resource Person
FGD	: Focused Group Discussion
FPO	: Farmer Producers Organization
Ha	: Hectare
HH(s)	: Household(s)
ICDS	Integrated child development scheme
LS	: Line Sowing
LT	: Line Transplant
ITDA	: Integrated Tribal Development
MDM	: Mid-Day Meal
MFP	: Minor Forest Produce
MSP	: Minimum Support Prices
NAL	: Non-Agricultural Labour
NCDS	: Nabakrushna Choudhury Centre for Development Studies
NSSO	: National Sample Survey Organization
OBC	: Other Backward Classes
OMM	: Odisha Millets Mission
SAA	: Shree Anna Abhiyan
PDS	: Public Distribution System
PVT	: Participatory Variety Trial
Qtls.	: Quintal
SC	: Scheduled Caste
ST	: Scheduled Tribe
WASSAN	: Watershed Support Services and Activities Network

INTRODUCTION

1.1 Background

Millets have been a staple food for millions of people in India for centuries, especially in the central tribal belts. They are drought-resistant, highly nutritious, and can be cultivated in a wide range of soil and climatic conditions. Millets are also low in Glycemic Index and gluten-free, making them an ideal choice for people with various health conditions. In recent times, there has been a renewed interest in millets cultivation due to its numerous health benefits and its potential to address food security challenges in the country. Government of India has been promoting cultivation of millets as a part of its efforts to increase farmers' income, reduce their dependency on water-intensive crops like rice, and promote sustainable agriculture. In this context, it is essential to understand the significance of millets cultivation and its associated challenges and opportunities.

Millets are cereal grains belonging to the Poaceae family, known as the grass family. Millets are small, round whole grains grown in India, Nigeria, and other Asian and African countries. It is considered an ancient grain as it has been used for human consumption, livestock and bird feed. Millets have multiple advantages over other crops, including drought and pest resistance. They can also survive harsh environmental conditions and can grow in less fertile soil. These benefits come 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 the cultivated varieties. Major millets includes pearl, foxtail, proso (or white), finger (orragi) and Minor millets includes 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 United Nations designated 2023 as the International Year of Millets; it helps this mission to get further attention of general public including the farmers and agriculturalist. In the Indian state of Odisha, millets have always been an integral part of the traditional diet and have been cultivated for centuries, primarily among the tribal population. However, during last couple of decades, the popularity of millets has declined due to the increasing adoption of modern food habits and the promotion of high-yielding crops like rice and wheat. This shift has led to a decline in soil fertility resulting increased vulnerability to climate change. To address these challenges, the Government of Odisha has launched several initiatives to promote the cultivation of millets, including “The Special Programme for Promotion of Millets in Tribal Areas of Odisha (also known as Shree Anna Abhiyan, SAA) with a novel organisational structure. The programme was initiated in 2017-18 to aims at increasing production, consumption, processing, and marketing of millets. The program aims to increase production, consumption, processing, and marketing of millets in tribal areas, where they have been a staple food for generations. In this context, it is crucial to understand the significance of millets cultivation in Odisha and its potential to promote sustainable agriculture and improve food security. Among other millets found in Odisha, Mandia constitutes a significant share of about 95 per cent.

The Millet Mission program tried to revive these nutrient-rich millets in the agricultural landscape which were fading away after its launch in 2017-18 by the Government of Odisha. It aimed to facilitate overall agricultural aspects 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, the planning and implementation of SAA phase VI began in 17 districts, including Boudh district, and this baseline study aims to provide information on the program's dimensions in the district. The profile of the Boudh district is presented below.

1.2 District Profile

Boudh district was newly formed on January 2, 1994. The district is bounded by river Mahanadi and Angul District in the north, Kandhamal District in the south, Nayagarh District in the East and River Tel and Subarnapur District in the west covering a total geographical area of 3098 sq. km.

Geographical Area

The district of Boudh is located between 20° 20' and 20° 50' North Latitude and 83° 34' and 84° 49' East longitude in the central part of Odisha. It is bounded by Sonepur district on north, Nayagarh District on the East and Kandhamal district on the South and West. The geographical area of the district is 3098 sq. km.

Demography

As per the demography is concerned, the district has got total population of 441162 people with sex ratio 991 Females per 1000 Males (2011 Census), including total 221625 male population and 219537 female population. It ranks Boudh is 22nd in size and 29th in population among the thirty districts of Odisha. Total SC population of the district is 104934 and ST population is 55364 as per 2011 census.

Economy

The total cultivable area of this district is more than eighty five thousand hectares, with paddy land constituting approximately sixty four thousand hectares. Other crops are grown over an area more than twenty one thousand hectares. Irrigation projects, diversion weirs and dug wells somewhat help in sustaining the agriculture of this District. Paddy, wheat, maize, finger millet, green gram, black gram, Kulthi, Groundnut and mustard etc. are some of the major crops grown here.

Topography

Most parts of the district have black alluvial soil. The referring blocks of Kantamal, Boudh and Harbhanga are full of black alluvial soil which is most fertile due to deposit of salt. Out of 3 blocks, 2 blocks have plain lands and one block has got mixture of plain and hilly ranges. The soil of the district has high moisture retention capacity. The soil is quite rich for growing paddy, pulses, oil seeds and sugarcane.

Forest

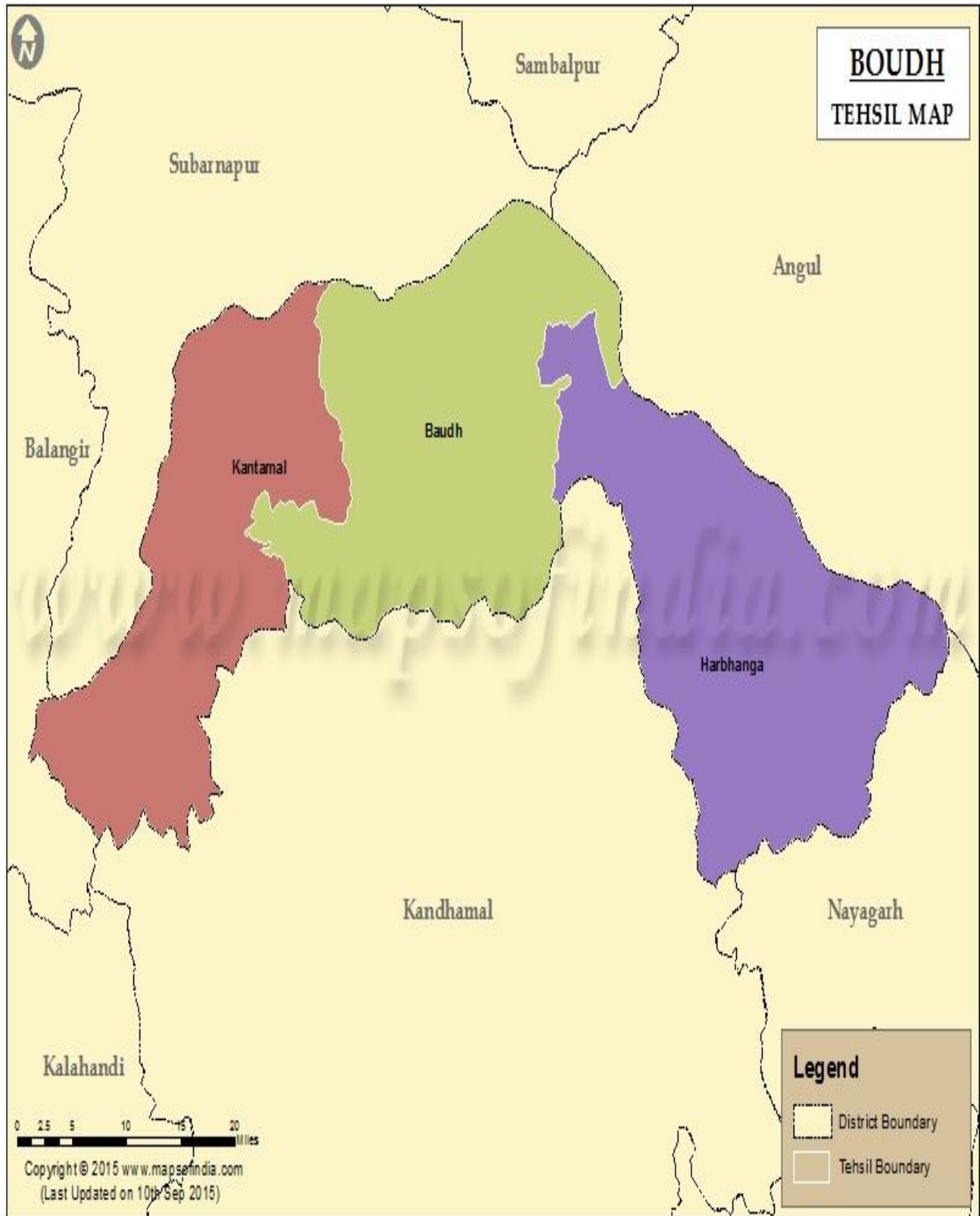
The total forest area of the district is 1277.17 sq.km, which is 41.22% of total area indicating more than the state average and ideal average i.e. 30% of the total geographical area of the district. The forest produce of economic importance in the district is Bamboo, Kendu Leaves, Mahua Flowers/Seeds, Siali Leaves, Timber, Fire wood, Myrabolam, Gendulingama and Tamarind. Over the years, forest suffered serious depletion due to relentless pressure arising from increasing demand for fuel wood, fodder and timber.

Administrative set up

The district has one Sub-Division i.e. Boudh; 3 Tehsils; 3 Community Development Blocks namely Boudh,

Kantamal and Harbhanga; 7 Police Stations; 4 Fire Stations; 69 Gram Panchayats and 1187 villages. There is one town i.e. Boudh in the district. The district headquarters is situated at Boudh.

Fig 1.1: Map of Boudh district with Blocks



Source: <https://gisodisha.nic.in/Block/BOUDH.pdf>

Table 1.1: Socio-economic and Demographic Features of Boudh District	
Indicators	Values
Census 2011	
Population (in Lakh)	4,41,162
Males (in Lakh)	2,21,625
Females (in Lakh)	4,19,537
Scheduled caste (in Lakh)	1,04,934
Scheduled Tribe (in Lakh)	55,364
HHs (in Lakh)	2,27,927
Sex ratio	991
Total Workers (in Lakh)	2,19,457
Main Workers (in Lakh)	2,29,076
Marginal Workers (in Lakh)	1,14,557
Non-Workers (in Lakh)	9441
Work Participation Rate (WPR, %)	
Cultivator as % of Total Worker	63657
Agricultural Laborers as % of Total Workers	104685
Literacy rate (%)	72.51
Total Geographical area(sq.km)	4242
Land Use Pattern (Area in '000ha)(2014-15)	
Forest	128
Land put to Non-agricultural use	21
Barren and Non-Cultivable Land	12
Permanent Pasture and Other Agricultural Land	17
Net Area Shown	86
Cultivable Waste Land	20
Current Fellows	3
Miscellaneous Trees and Groves	13
Agriculture, 2014-15	
Fertilizer Consumption(kg/ha)	37.78
Irrigation, Kharif ('000ha)	160.02
Irrigation, Rabi ('000 ha)	150.38
Other Information	
No. of Village Electrified (as on March 2014)	1186
No. of GPs	69
No. of Bank	52
No. of BPL families	69,404
<i>Source: District Statistical Handbook, Boudh, 2011 and District at a Glance 2016</i> <i>Note: MGNREGS is Mahatma Gandhi National Rural Employment Guarantee Scheme</i>	

1.3 Objectives

The objectives of the baseline survey were to obtain information on proposed interventions under SAA around production, consumption, processing and marketing. It is also pertinent to have some background information of the HHs surveyed. The objectives are as follows:

- To assess the socio-economic condition of the HHs;
- To outline millets 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. Sample Design

Multi-stage sampling method has been used to select the sample HHs. In the first stage, Boudh District has been selected purposively for the study as it is one of the seven districts where state Government has introduced this programme. In the second stage, three blocks namely Boudh, Harbhanga and Kantamal has been selected purposively. In the third stage, two GP from each block has been randomly selected, and in the last stage, 20 HHs from each village have been randomly selected. Therefore, the total number of 240 HHs from 12 villages, six GP and three blocks has been randomly selected from this study. The details have been presented in the following Table 1.2.

Table 1.2: Distribution of Sample Households in Boudh District			
<i>Blocks</i>	<i>Programme Households (N)</i>	<i>Sample Households (N)</i>	<i>% of HHs Covered under the Survey to Programme HHs</i>
Boudh	509	80	15.71
Harabhanga	245	80	32.65
Kantamal	517	80	15.47
Total	1271	240	18.88

Source: WASSAN

1.4.2 Data Collection, Compilation and Analysis

A total of twelve villages were selected from three blocks, where six Gram Panchayats across three blocks were selected for data collection in the Boudh district for the Baseline Survey of 2022, Phase VI. These villages were selected using the simple random sampling method based on the list provided by the implementing agency about the perspective villages to be included under Phase VI across the three blocks of the district. Two Gram Panchayats were randomly selected from each block, and two villages were selected from each of these Panchayats.

This baseline survey report is based on both secondary and primary data. The primary data was collected from the respondents in the concerned districts by using a pre-tested interview schedule (Annexure 1) and Focus Group Discussion (Annexure 2). The secondary data on the geographical information,

population, agriculture, education, irrigation, forest and institutions has been collected by using various published and unpublished sources including the 2011 Census. In addition, to supplement and complement the findings made under the Baseline Survey, Focused Group Discussions (FGDs) were conducted in each selected village.

1.5 Limitations of the study

The present Baseline Survey focuses solely on three Blocks of the Boudh 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 240 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, sample 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

The baseline survey has been divided into five Chapters including the current Introductory Chapter, which provides District Profile, Objectives, Methodology and Limitations. Chapter II provides Socio-economic Profile of surveyed HHs. Chapter III provides details on Production and Productivity of Millets. Chapter IV discusses Consumption pattern of Millets. Chapter V annotates on Processing and Marketing of Millets.

SOCIO-ECONOMIC PROFILE

2.1 Introduction

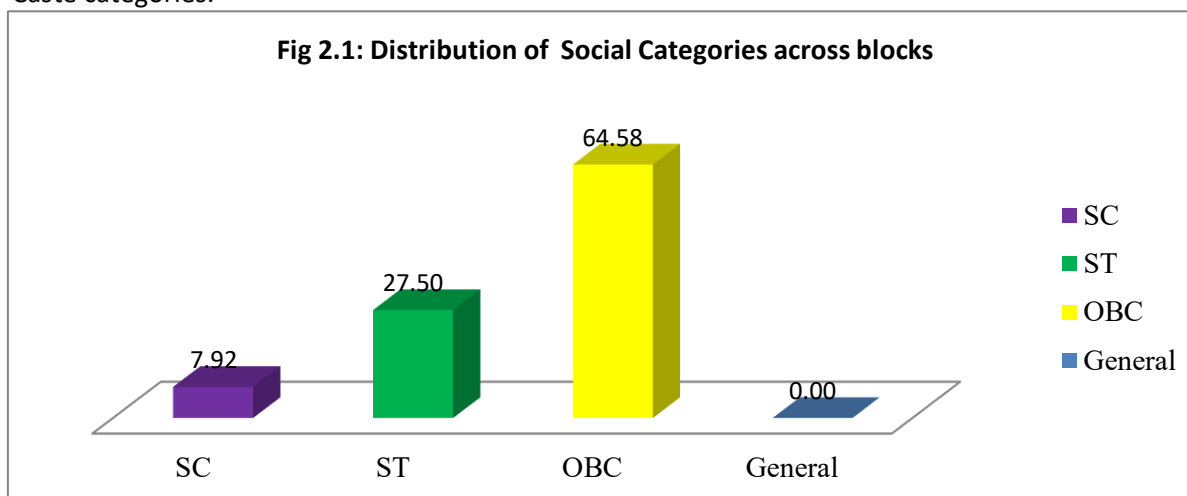
This Chapter investigates the social and demographic profile of HHs surveyed in the district that is their distribution by social group, religion, and gender. In addition, for the HHs surveyed, it provides the distribution by poverty status (proportion below poverty line and proportion above), distribution by economic activities (not mutually exclusive, as a HH can have multiple economic activities), and distribution by house structure. It also provides information about the distribution of households by their landownership and operational holdings.

2.2 Social and Demographic Profile

This section discussed the social composition, economic activities, poverty, and housing structures of the sample households.

2.3 Social Composition

Out of three blocks in Boudh District, in phase VI, intervention took place in three Blocks namely, Boudh, Harabhanga and Kantamal. For the present study 240 sample households have been surveyed. About distribution across social groups, Table 2.1 and Fig 2.1, indicate that 27.50 percent belongs to Scheduled Tribes 65.58 per cent HHs belong to Other Backward Classes (OBC). 7.92 per cent belongs to Schedule Caste categories.



Social category	Boudh		Harbhanga		Kantamal		Total	
	No	%	No	%	No	%	No	%
SC	5	6.25	6	7.5	8	10.00	19	7.92
ST	19	23.75	18	22.5	29	36.25	66	27.50
OBC	56	70.00	56	70.00	43	53.75	155	64.58
Total	80	100	80	100	80	100	240	100

Source: Baseline Survey, 2022

2.4 Distribution of population by Gender

Total population from the surveyed HHs is 832; the share of male population was higher than the female population. From the total population, 57.69 per cent were male and 42.31 per cent were female. The block wise distribution of population by gender shows that in Boudh block, out of total population 407 among the sample households 56.02 per cent are male and 43.98 per cent are female. Similarly, if we see block wise distribution in Harabhanga block, out of total population 158 households mean 59.49 percent are male and 40.51 percent are female. Likewise, in Kantamal block, out of total population 267 households that means 59.17 per cent are male and 40.83 per cent are female (Table 2.2).

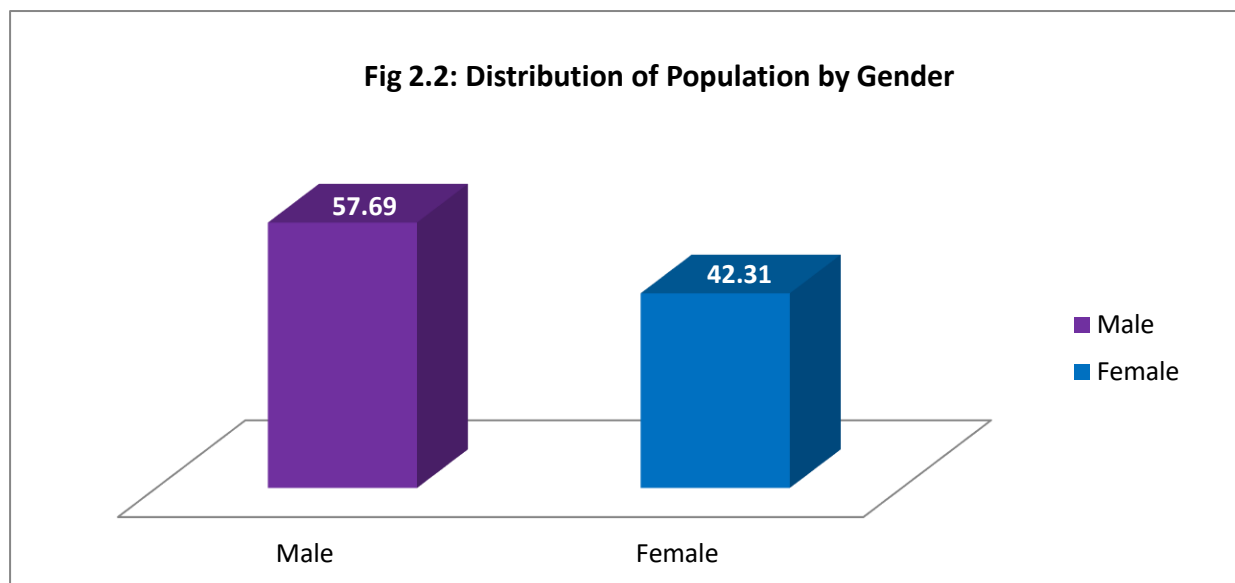


Table 2.2: Distribution of Population by Gender across Blocks								
Sex	Boudh		Harabhanga		Kantamal		Total	
	No	%	No	%	No	%	No	%
Male	228	56.02	94	59.49	158	59.17	480	57.69
Female	179	43.98	64	40.51	109	40.83	352	42.31
Total	407	100	158	100	267	100	832	100

Source: Baseline Survey, 2022

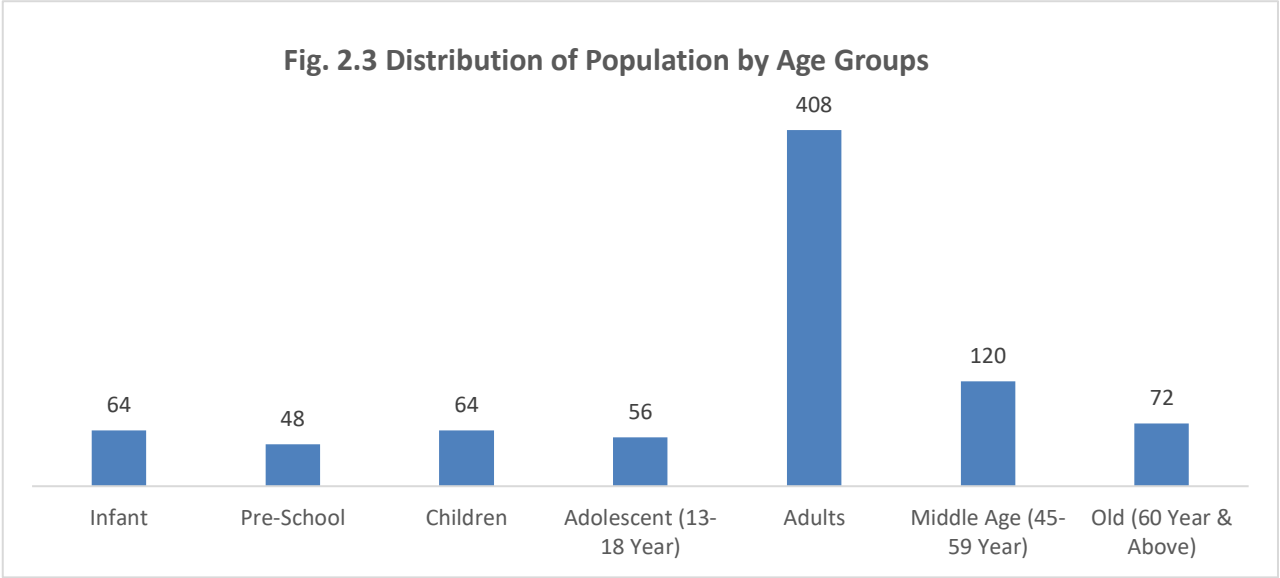
2.5 Religious Distribution

The religious distribution of the surveyed HHs across the three selected blocks reveals the overwhelming presence of Hindu HHs across the blocks. Out of total 240 surveyed households all are Hindu.

2.6 Population Distribution by Age Groups

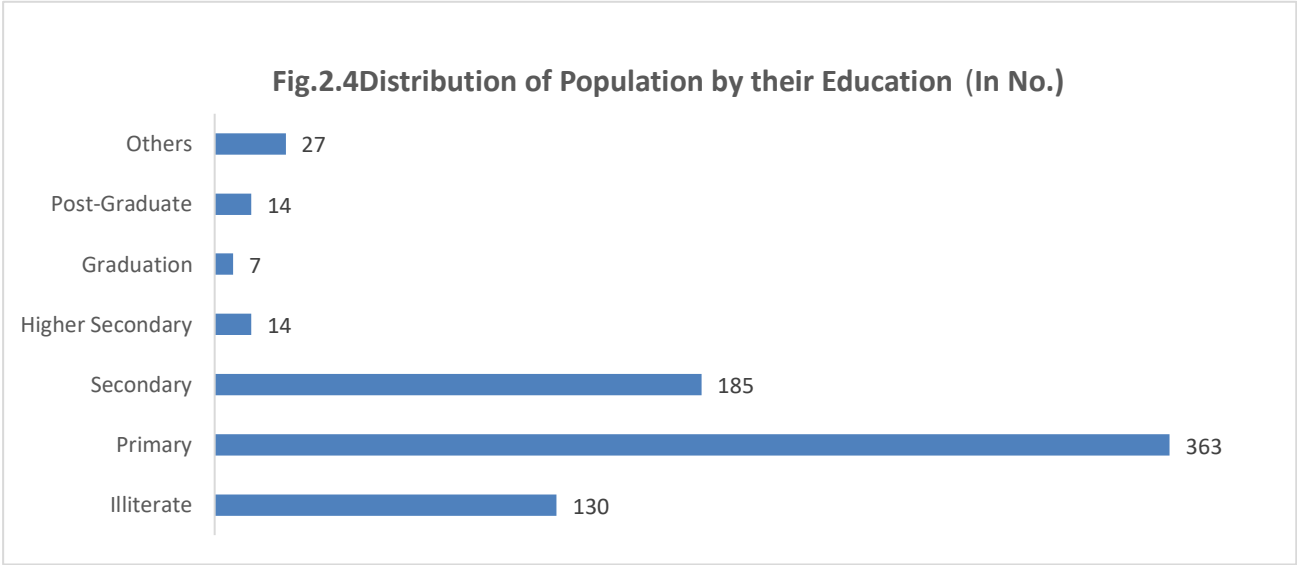
Fig 2.3 shows the age-wise distribution of the surveyed population across the three blocks of Boudh, Harabhanga and Kantamal reveals that adults (19–44 years) constitute the largest proportion, with 408 individuals, followed by those in the middle-aged group (45–59 years) numbering 120 and the elderly population (60 years and above) comprising 72 individuals. Among the younger age groups, both infants (0–

2 years) and children (6–12 years) account for 64 individuals each, while the pre-school age group (3–5 years) includes 48 individuals. Adolescents (13–18 years) make up 56 individuals of the total population. Altogether, the surveyed population comprises 832 individuals. This overall distribution provides a clear demographic representation of the population structure in the study area.



2.7 Educational Status

The field survey reveals the educational profile of 740 individuals across the three blocks: Boudh, Harabhanga and Kantamal. The educational profile of the population indicates a significant portion of individuals have attained education up to the primary level, accounting for 363 persons out of the total 740. This is followed by 185 individuals educated up to the secondary level. A considerable number of people, 130 in total, are illiterate, indicating limited access to or continuation in formal education. The number of individuals who have completed higher secondary and postgraduate education stands at 14 each, while only 7 persons have attained graduation. Additionally, 27 individuals fall under the “others”, which may include those with vocational or technical education. This overall distribution provides an overview of the educational attainment pattern of the surveyed population. (Fig.2.4)



2.8 Ration Card Holding Status

Table 2.3 show the distribution of sample households by their possession of ration card across the three selected blocks of Boudh district. It shows that out of 240 sample households a very significant majority i.e., 97.50 per cent households possess ration card. The block wise distribution of sample households by their ration card possession reveals that in Kantamal block all the sample households possess ration card. In Boudh 95.00 percent households possess ration card and 5.00 percent do not have possess ration card. Similarly, Harabhanga have 90.00 ration cards and while 10.00 per cent do not possess ration card.

Table 2.3: Distribution of Households by ration card holding status

Blocks	Boudh		Harabhanga		Kantamal		Total	
	N	%	N	%	N	%	N	%
Ration card	76	95.00	72	90.00	80	100	228	95.00
Without Ration card	4	5.00	8	10.00	0	0	12	5.00
Total	80	100	80	100	80	100	240	100

Source: Baseline Survey, 2022

2.9 Structure of Household

The house structure considers as an important indicator of the social and economic status of the family. Table 2.5 reveals that out of the total 240 samples HHs, 54.58 per cent are *Kutcha* houses, 25.83 per cent are *semi-Pucca* houses and 19.58 per cent are *Pucca* houses. The following table represents blocks wise house structures. (table 2.4)

Table 2.4: Distribution of Household by their House Structure across Blocks

Blocks	Boudh		Harbhanga		Kantamal		Total	
	N	%	N	%	N	%	N	%
Kutcha	35	43.75	60	75	36	45	131	54.58
Semi-Pucca	20	25	12	15	30	37.5	62	25.83
Pucca	25	31.25	8	10	14	17.5	47	19.58
Total	80	100	80	100	80	100	240	100

Source: Baseline Survey, 2022

Similarly, the Block-wise distribution of HHs' house structure shows that in Boudh block majority of HHs has Kutcha houses. Out of total 80 sample households 43.75 per cent are Kutcha houses, 25.00 per cent of households have semi-Pucca and while 31.25 per cent of households have Pucca houses. Likewise, in Harbhanga block 75.00 per cent of households have Kutcha houses, 15.00 per cent of households have semi-Pucca and 10.00 per cent of households have Pucca houses. While in Kantamal block, 45.00 per cent of households have Kutcha houses, 37.50 per cent of households' have semi-Pucca houses and only 17.50 per cent of households have Pucca houses.

2.10 Occupation

The distribution of population by their economic activities among the sample households presented in Table 2.5. It reveals that out of total population of 832 persons, 30.77 per cent are farmers, followed by housewives

23.32 per cent. 12.38 per cent worked as daily laborers and 0.96 per cent worked in government sectors, 2.16 per cent engaged in business sectors and private employees were 1.68 per cent. Students constitute 19.23 per cent of the population. The unemployed and others were 4.33 per cent and 3.97 percent respectively. The following Table provides blocks wise detailed information.

Table 2.5: Distribution of Households by economic activities across Blocks								
Occupations	Boudh		Harabhanga		Kantamal		Total	
	N	%	N	%	N	%	N	%
Agriculture	112	27.52	52	32.91	92	34.46	256	30.77
Daily Labour	56	13.76	20	12.66	27	10.11	103	12.38
Business	10	2.46	4	2.53	4	1.50	18	2.16
Govt. sector	7	1.72	1	0.63	0	0.00	8	0.96
Private sector	8	1.97	5	3.16	1	0.37	14	1.68
Artisan	10	2.46	0	0.00	0	0.00	10	1.20
Student	80	19.66	27	17.09	53	19.85	160	19.23
House wife	90	22.11	35	22.15	69	25.84	194	23.32
Unemployed	22	5.41	8	5.06	6	2.25	36	4.33
Others	12	2.95	6	3.80	15	5.62	33	3.97
Total	407	100	158	100	267	100	832	100

Source: Baseline Survey 2022

The above table highlights the block-wise distribution of population by their economic activities is presented in table 2.5; it shows that in Boudh, out of the 407 population, 27.52 per cent are farmers followed by 22.11 per cent are housewives. 13.76 per cent of them worked as wage labourers, 2.46 per cent are business owners and 1.97 per cent is private employments. Students made up 19.66 per cent. About 5.41 per cent of population under the working age group are unemployed and 2.95 per cent have other occupations. Likewise, in Harbhanga block out of the total population of 158 persons, 32.91 per cent are farmers, 22.15 per cent are housewives, 12.66 per cent are wage labourers, 0.63 per cent is government employees and 3.16 per cent are private employees. Students constitute 17.09 per cent. About 5.06 per cent of population under the working age group are unemployed while only 3.80 per cent have other occupation. In Kantamal block, out of 267 populations, 34.46 per cent are farmers followed by 25.84 per cent are housewives. 10.11 per cent are wage labourers, 0.37 per cent are private employees. Students made up to 19.85 per cent. About 2.25 per cent of population under the working age group are unemployed and 5.62 per cent have other occupation.

2.11 Annual Income

The annual income distribution pattern of the sample households indicates that the majority, 105 out of 240 households, fall within the annual income range of ₹40,001 to ₹80,000. This is followed by 45 households earning between ₹80,001 and ₹1,20,000, and 41 households with an income up to ₹40,000. A smaller proportion of households, 23, earn between ₹1,20,001 and ₹1,60,000, while 18 households fall in the income range of ₹1,80,001 to ₹2,00,000. Only 8 households reported earnings above ₹2,00,000 annually. The overall pattern suggests that most households belong to the lower- to middle-income categories, reflecting a modest economic condition in the study area.

2.12 Land Ownership Pattern

The landholding pattern of the surveyed households reveals that the majority are marginal farmers, owning up to 2.5 acres of land, accounting for 160 out of 240 households. This is followed by 60 small farmers with holdings between 2.5 and 5 acres, while 20 households fall under the medium category, possessing 5 to 10 acres of land. Notably, there are no landless or large farmers (with more than 10 acres) reported in the study area. Overall, the data indicate a predominance of small and marginal farmers, reflecting a landholding structure characterized by limited agricultural resources and small-scale farming practices.

2.13 Conclusion

Majority of the surveyed households across the three selected blocks belongs to Other Backward Category (OBC). Agriculture is the primary occupation for most of the people. From the various social and economic indicators mentioned in this chapter (including Tables and Figures) and corresponding analysis indicates that out of all 240 surveyed HHs across the three blocks of Boudh district, majority of them possess ration cards and most of them have semi-Pucca houses.

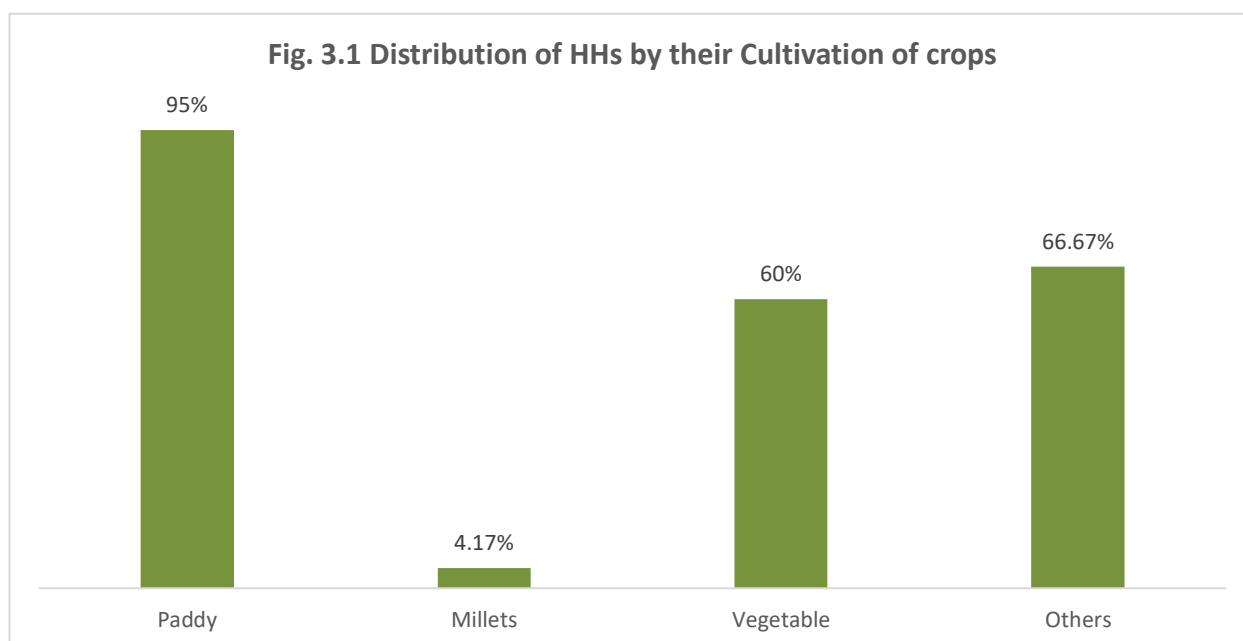
PRODUCTION OF MILLETS

3.1 Introduction

The Baseline Survey 2022, Phase VI of SAA was conducted in three selected blocks of Boudh district to assess the situation of millets cultivation and its usage in the target villages before the implementation of the programme interventions. This chapter deals with the production of millets in Boudh, Harbhanga and Kantamal blocks of the district and analyses the data collected during the survey. The analysis focuses on the distribution of area under millets and other crops, the usage of seeds and agronomic practices, as well as the production and yield of millets in the sampled villages. The chapter also highlights the challenges and opportunities for promoting millets in the district.

3.2 Cropping pattern of Households

The distribution of sample households by the crop types across the three blocks - Boudh, Harabhanga and Kantamal offers important insights into the cropping patterns in the study area. The cropping pattern of the surveyed 240 households in Boudh district shows that paddy is the predominant crop, cultivated by 228 households (95 per cent), reflecting its importance as the major staple crop of the region. Vegetables are also widely grown, with 144 households (60 per cent) engaged in their cultivation, followed by 160 households (66.67 per cent) cultivating other crops such as pulses and oilseeds. Millets, however, are cultivated by only 10 households, representing a very small share (around 4.17%) of the total. Fig.3.1 indicates that while paddy remains the dominant crop in the district, millet cultivation has declined considerably, highlighting the need for renewed focus on promoting millet-based farming systems for crop diversification and nutritional values.



3.3 Area, Production and Yield of Millets

The surveyed HHs in Boudh district indicated production of millets only in form of Mandia. As presented in Table 3.1, the total production of millets are 19.58 quintals under 7.9 acre of land. In Boudh block, the total production is 14.25 quintals with average quintal per acre is 2.57 and per hh is 2.04 respectively. Similarly, in Harabhanga block the total production is 5.33 quintals with average quintal per acre is 2.27 and average quintal per household is 1.78. In Kantamal block there is no millet cultivation occurs.

Table 3.1: Distribution of Area, Production, and yield of Ragi								
Blocks	No of HHs Cultivating Millets		Area in Acres		Production (in Qtls)		Yield	
	No	%	No	%	No	%	Qtls/Ac	Qtls/HH
Boudh	7	8.75	5.55	70.25	14.25	72.78	2.57	2.04
Harbhanga	3	3.75	2.35	29.75	5.33	27.22	2.27	1.78
Total	10	4.16	7.9	100.00	19.58	100.00	2.48	1.96

Source: Baseline Survey 2022

3.4 Perception on Quality of Seeds Used

Seeds quality plays a vital role in production and yield of millets. Good quality seeds increase the production resulting in higher yield. High-quality seeds are preserved for the next crop to reap the benefits. It was attempted to understand the general perception of millet farmers; on the quality of seeds, they use for millets cultivation. All millet producing sample households in Boudh district about 10 (100 per cent) are satisfied with the quality of seeds they use for millets cultivation.

3.5 Types of Millets Seeds Used by Households

From the field data it reveals that the majority of the sample households across all the district predominantly rely on local varieties of seeds for millet cultivation. Out of total of 10 households, all are reported that they using local or *Desi* seeds. Block wise analysis shows that in Boudha and Harbhanga 7HHs and 3HHs exclusively use local seeds.

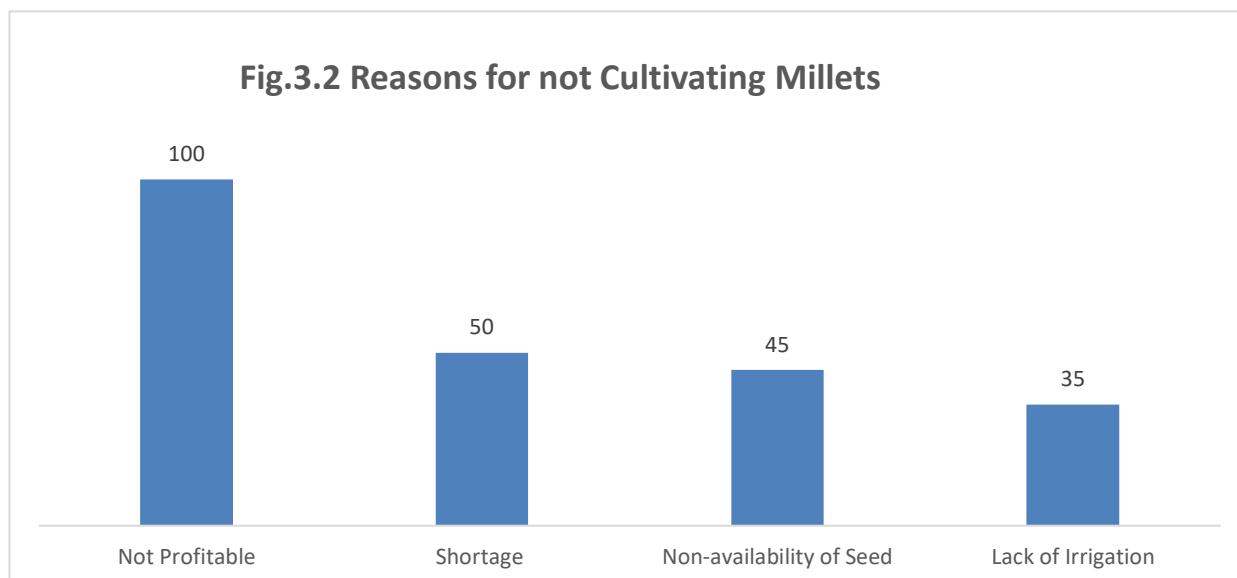
3.4 Package of Practices

Different method of cultivation techniques involved in the process of cultivation such as broadcasting, line sowing/line transplanting, Systematic Millets Intensification (SMI) method, and combination of one or more methods used by different HHs. From 10HHs that cultivated *Mandia*, all cultivating households are adopted line transplanting method.

3.7 Reasons for not Cultivating Millets

The data highlight the major constraints faced by farmers in crop cultivation in the study area. A significant proportion of respondents (100 households) reported that farming is not profitable, indicating that low returns from agricultural activities. This may be due to high input costs, low market prices, or poor productivity. The shortage of land was cited by 50 households, reflecting land fragmentation and small holdings that limit agricultural expansion. Non-availability of quality seeds, reported by 45 households, suggests gaps in access to reliable seed supply systems, which can directly affect crop yield and quality.

Additionally, lack of irrigation facilities, mentioned by 35 households, remains a major hindrance, as dependence on rain-fed agriculture makes crop production vulnerable to climatic variability.



3.8 Conclusion

All surveyed households who produced millets during baseline year of 2022, cultivated only *Mandia*. Here most of HHs are cultivate paddy, vegetables and other crops as compare to Millet cultivations. Millets cultivated through line transplanting methods using local/desi seed. Non-cultivation is largely driven by perceptions of not profitable, shortage of land, and seed unavailability and lack of irrigation. In the next chapter we will discuss about millets consumption.

CONSUMPTION OF MILLETS

4.1 Introduction

The Baseline Survey, 2022 was conducted to assess the trend and patterns of millets consumption in the target villages before implementing the programme in the three selected blocks of Boudh district, namely Boudh, Harabhanga and Kantamal. The main objective of this chapter is to analyse how the households that participated in the survey vary in their millets intake in different seasons, and meals, as well as different times of the day across age groups among the population of the sample households. The chapter also explores the diversity of millet varieties, and different recipes are consumed by these households. By doing so, the chapter aims to provide a comprehensive picture of the millets consumption patterns and preferences among the sample households in Boudh district, which is one of the focus areas of SAA.

4.2 Millets Consumption across Seasons

The seasonal pattern of millet consumption across the surveyed households in Boudh district indicates variation in consumption habits throughout the year. During the summer season, millet consumption is relatively higher, reported by 10 households (4.16% of the total), followed by winter, with 7 households (2.91%), and the rainy season, with 6 households (2.5%). Among the blocks, Boudh shows a slightly higher number of households consuming millets across all seasons compared to Harabhanga. In Kantamal block none of them consume millets. The avg. millets consumption in this dist. Is 12.05k.g.

Table 4.1 Millets Consumption Across Seasons						
Seasons	Boudh (7HH)		Harabhanga(3HH)		Total	
	N	%	N	%	N	%
Rainy	5	6.25	1	1.25	6	2.5
Winter	5	6.25	2	2.5	7	2.91
Summer	7	8.25	3	3.75	10	4.16

Source: Baseline Survey, 2022

4.3 Consumption of Millets during Different Meals of the Day

Meal-wise millet consumption (table 4.2) reveal that millets are consumed in limited quantities across both Boudh and Harabhanga blocks. A total of 10 households (4.16%) reported consuming millets during breakfast, making it the most common time for millet-based dishes. This is followed by lunch, where 8 households (3.33%) include millets in their meals, and evening snacks, with only 3 households (1.25%) consuming millet-based preparations. Between the two blocks, Boudh has a slightly higher number of millet-consuming households across all meal times compared to Harabhanga.

Table 4.2: Distribution of Consumption of millets during different meals of the day						
Blocks	Boudh		Harabhanga		Total	
	N	%	N	%	N	%
Breakfast	7	8.75	3	3.75	10	4.16
Lunch	5	6.25	3	3.75	8	3.33
Evening Snacks	2	2.50	1	1.25	3	1.25

Source: Baseline Survey, 2022

4.4 Consumption of Different Millets Recipes

From this field study it is found that people were consuming millets in several ways in the form of Tampo/Pitha, Khiri, Jau, and Lassi and so on. In Bodh dist. across the two blocks 10 HHs consumed millets as a Tampo/Pitha, and 8 HHs consume millet as both Jau or Torani and Khiri.

In block wise 9 HHs (11.25 per cent) consumes both Tampo/Pitha and Jau/Torani, 8HHs (10 per cent) consumes Khiri in Boudh block. Similarly, in Harabhanga only one HH consume millet as Tampo/pitha.

4.5 Conclusion

Findings of the Baseline Survey 2022 about the pattern of millets consumption among the sample households across the two blocks of Boudh district shows that Millet consumption is very low due to lack of production and low rate of consumption among the households. Few respondents consume millets during breakfast and lunch time like *Jau/Torani*, *Tampo/Pitha* etc. However, none of the households in any block of Boudh district prefer to consume millets during dinner time.

Chapter V

PROCESSING AND MARKETING OF MILLETS

5.1 Introduction

Processing and marketing play a vital role in agricultural activity. During processing goods are transformed so as to increase their shelf-life and to make them more acceptable to the consumer than in their original form. And marketing is essential to sell off surplus products. This chapter looks into processing of millets by traditional manual methods and by machines, and the mode by which millets are sold. It also attempts to make an analysis of millets produced, consumed sold and stored.

5.2 Processing Units

Traditionally people usually prefer to process millets manually by using *Chaki* or *Ghurna*, but nowadays due to technological innovation people get accessibility to machines for the processing millets in the locality of rural areas which helps them to reduce the time of work and manpower. Now-a-days, people prefer processing of millets both manual and with machinery according to easy availability in the locality. From the surveyed, it was found that, out of 240 sample household, only 10 HHs cultivated millets and adopt manually across the dist.

5.3 Marketing

Marketing is an important dimension for millets producing households to earn income by selling their surplus produce and improving their quality of life. Better marketing opportunities generate hope and interest to cultivate millets among these households, and selling their surplus millets through different mean. Here out of 10 cultivating HHs only 7 HHs sells the millets.

5.4 Conclusion

The processing and marketing of millets in the sample households across the three blocks of Boudh district under Baseline Survey 2022, Phase VI reveals that, only few households are cultivating millets by using traditional methods and sells them through the middle man/local businessman

Annexure: Mapping of Baseline Survey Data of Boudh District, 2022

Sl.	Indicators	Unit	Baseline Value			Total
			<i>Boudh</i>	<i>Harabhanga</i>	<i>Kantamal</i>	
1	% of Sample households Cultivating Millets	%	8.75	3.75	0	4.16
2	Types of Millets Cultivated (in 2021)					
	a) Mandia	%	8.75	3.75	0	4.16
3	Avg. Area under Millets/ HH (Acre)	Acre	5.55	2.35	-	7.9
4	Millets/Ragi Production per HHs	Qtls	14.25	5.33	-	19.58
5	% millets area to total cultivated area	%	70.25	29.75	-	100
6	Package of Practice	%				
	a) Broadcasting	%	0	0	-	0
	b) LS	%	0	0	-	0
	c) LT	%	100	100	-	100
	d) SMI		0	0	-	0
7	Yield Rate (Qtls./Acre)	Qtls	2.57	2.27	-	2.48
8	% of HHs Consuming Millets	%				
	a) Breakfast	%	8.75	3.75	-	4.16
	b) Lunch	%	6.25	3.75	-	3.33
	c) Evening Snacks	%	2.50	1.25	-	1.25
	d) Dinner	%	0	0	-	0
9	Popular Millets Recipes (%HHs)				-	
	a) Tampo/Pitha	%	11.25	1.25	-	4.16
	b) Jau/Torani	%	11.25	7.5	-	3.33
	c) Khiri	%	10.00	0	-	3.33
	d) Idli/ Upma	%	0	0	-	-
10	% of HHs using Processing Ragi					
	a) Manually	%	8.75	3.75	-	3.13
	b) Machines	%	0	0	-	0
	c) Both	%	0	0	-	0
11	% of HH Selling Millets					
	a) Middleman	%	6.25	2.50	-	2.91
	b) Mandi	%	0	0	-	0
	c) Haat	%	0	0	-	0
	d) Money lender/ Sahukar	%	0	0	-	0
	e) Sahukar	%	0	0	-	0
12	Distress sale (% of Households)	%	6.25	2.50	-	2.19

Source: Baseline Survey, 2022



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:.....

4. Operational Holdings Under Different Crops (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									

5. Annual Expenditure:

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							

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

7. Have you taken any agricultural loan? 1-Yes 2-No If yes, please provide details.....

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. Millets 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

Part-V: Marketing of Millets

31. Do you sell millets?

1. Yes 2. No

32. Types of Millets, you Sell and Quantity

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)

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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