

**LIVELIHOOD OF WOMEN WORKING IN AGRICULTURE
AND AS VEGETABLE VENDORS IN THE VILLAGE OF
NACHINOLA, BARDEZ GOA.**



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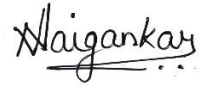
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DECLARATION

I, Nidhi D. Vaingankar, hereby declare that this dissertation entitled “Livelihood of Women working in Agriculture and as Vegetable Vendors in the village of Nachinola, Bardez Goa” is the outcome of my own study undertaken under the guidance of Ms. Prachi Prabhu, Women’s Studies, Manohar Parrikar School of Law, Governance and Public Policy, Goa University. It has not previously formed the basis for the award of any Degree, Diploma or Certificate of this or any other university. I have duly acknowledged all the sources used by me in the preparation of this dissertation.



Date: 5th July 2021

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CERTIFICATE

This is to certify that the dissertation entitled “Livelihood of Women working in Agriculture and as Vegetable Vendors in the village of Nachinola, Bardez Goa” is the record of original work done by Ms. Nidhi D. Vaingankar under my guidance. The results of the research presented in the dissertation have not previously formed the basis of any degree, diploma or certificate of this institute or any other institute or University.

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CHAPTER 1

Introduction

1.1. Agriculture in India and Goa

Agriculture has been associated with the production of essential food crops. In India agriculture is a livelihood for most of the population and can never be underestimated which contributes to the Gross Domestic Product (GDP). The contribution of GDP was reduced to less than 20% which was due to severe drought in the year 2002 and the growth rate was negative, and the contribution of other sectors increased. The share of agriculture in GDP increased to 19.9% in 2020-2021 from 17.8% in 2019-20. (Kapil, 2021)

The production of total food grain in India is estimated to be a record 219.95 million tons as per the estimates of the Indian Council for Agricultural Research (ICAR), which demand there would be an increase in food grain to 345 million tons by 2030. India can grow a variety of crops because it has favorable large arable/fertile land, all types of weather conditions, and has different agro-climatic zones. Farmers are still not able to earn respectable earnings. (Kapil, 2021)

There is substantial growth in production productivity of vegetable crops with a total annual production of over 88.6 million tons whereas India's share in the world production of vegetables is 11.4%. The average productivity of vegetables is 14.4 tons/ha. (Thangam et al., 2009)

1.2. Goa at a glance.

Goa is a tiny state located on the West Coast of India, spread over in an area of 3610 sq. km and it has a total geographical area of 3, 61,113 hectares which lies between 14°16" North latitude and 73°75" East longitude bound by the Arabian Sea on the West, State of Maharashtra on the North and Karnataka on East and South. The temperature is ranging from 18 to 35°C throughout the year, the climate is hot and humid. The annual rainfall is between 2500 to 3500mm between June and October. The soils are predominantly red lateritic (73.40%) followed by alluvial and marshy soils (11.70%), sandy coastal soils (10.11 %), and saline soils (4.79%). (Thangam et al., 2009)

According to the State Agriculture Infrastructure development Plan in Goa, Agriculture represents as the third important economic activity providing livelihood to 16% of population after tourism and mining. The percentage covers all type of crops cultivated in Goa. (Directorate of Agriculture, n.d.)

In Goa, during the year 2006-2007, the area under vegetable production was 8213 hectares with an annual production of about 84,290 tons, and the average productivity was around 10 tons/ha which is low compared to the national average of 15 tons/ha. The bulk of vegetable requirements is met from the neighboring states like Karnataka and Maharashtra as cultivation of vegetable crops was very low. (Thangam et al., 2009)

1.3. Role of Agriculture in Livelihood Systems

Most of the families in developing countries such as India derive their livelihoods from agriculture in both farm and non-farm sectors. *Livelihood* is defined as enough stock and the necessary flow of food and cash with an individual or a family to meet their basic needs. *Livelihood security* means secured ownership of, or access, resources, income-earning activities, including reserves, ease stock, and to meet whenever needed. (Acharya, July-December 2006)

1.4. There are four major areas to obtain livelihoods.

First is the production-based livelihood: - Many small and marginal farmers earn their livelihoods through production on small pieces of land and for such kinds of households, availability, and access to inputs and improved methods of production are quite critical for their livelihoods. (Acharya, July-December 2006).

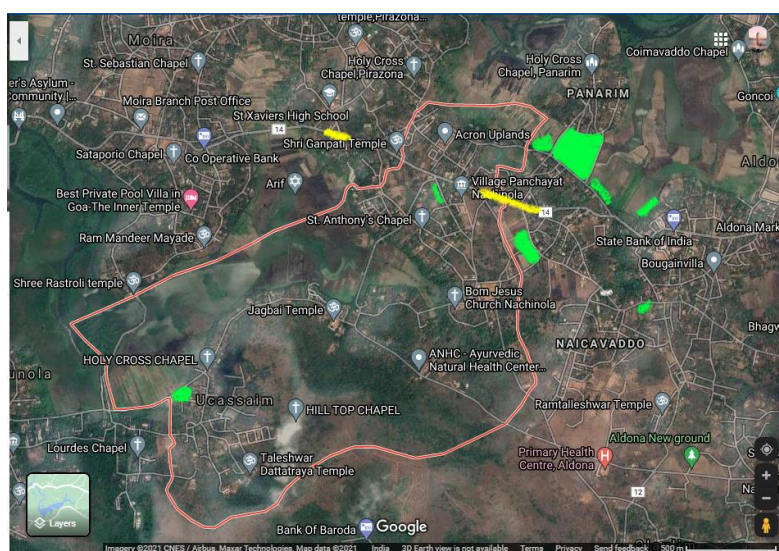
Second is the labour-based livelihood: - Most of the small landholders and landless rural households derive livelihoods by selling their labour. For their livelihoods, demand for labour, wage rates, and prices of food are critical factors. (Acharya, July-December 2006).

The third is the exchange- or market-based livelihood: - This occurs when those rural households which produce excess food and non-food agricultural products, earn their livelihood by selling their surplus goods in the market. The livelihood of these rural households is affected by the market system for this product and the relative prices of what they sell and what they buy. (Acharya, July-December 2006).

Fourth, transfer-based entitlements. The households without any income-earning asset or able-bodied person to work depend for their livelihoods on transfers from the government or other social organizations. (Acharya, July-December 2006).

1.5. Nachinola village and origin of the name.

Figure i: Map of Village Panchayat Nachinola



Farms visited during Field work



Vegetable Vendors

Source: Google Map

Nachinola is a small, landlocked village in the North Goa district, which is situated between Moira and Aldona, lying in the Bardez sub-district or taluka. It is divided into

three (village sub-division) vadde such as Vainguinn, Zoidar, and Borvonn. The scenic village is on the way, away from the main road that passes through it and connects Mapusa and Aldona. There are 2 temples in the village of Nachinola as Ganapati Devasthan and Rawalghadi Rawalnath temple and Bob Jesus church along with 7 chapels. There are a total of 7 wards in the village according to the panchayat.

Origin of the name

It is believed that the name Nachinola comes from the expression of Nach-go-Nola (dance O Nola) Where it is the belief that a talented dancer called Nola would be egged on to dance, with pleas of "Nach go Nola, Nach go Nola" (Do dance, Nola). This is how its name thus grow from Nachnola to Nachinola. (Nachinola, *GoaHolidayHome*, n.d.)

1.6. Population

According to 2011 census and panchayat data, the Total Population of Nachinola is 2725 out of which male is 1360 and female 1365. The total number of households is 645 and a literacy rate of 88.6%. In the age group of 0-6 years, it had 252 children, comprising 144 males and 108 females. The 2011 Census also showed Nachinola to cover an area of 244.05 hectares. (Nachinola Population - North Goa, Goa, n.d.)

1.7. Major vegetable crops in Goa

In the state of Goa, for crop season, the soil and climatic conditions are favorable for the growth of a variety of crops.

Table 1: Major vegetable crops in Goa

Sr.no	Season of cultivation	Major vegetable crops
1.	Kharif or rainy season (June-September)	Cucumbers(tovshe), Ridge gourd (ghosale), snake gourd (padvole) , bitter gourd (karli), pumpkin (dudi), Ivy gourd (Tindly), okra (bhende), chilli etc.

2.	Rabi or winter season (October-February) Also known as Varve	Sweet potato, Brinjal, Amaranthus (tambdi bhaji), vegetable cowpea(vali), Radish(mulee),knol knol(knab), okra (bhende), pumpkin, chilli, onion, cluster beans(chitki) , sweet corn eat.
3.	Rabi extended summer. (February-May)	Amaranthus (tambdi bhaji), okra (bhende), onion, chilli, vegetable cowpea (vali).

Source: (Thangam et al., 2009)

Varve: - varve is the season known in Goa for the Rabi season, which is grown between October to February which is later extended to the summer season between Februarys to May.

1.8. Chapter Summary

1.8.1. Chapter 1: talks about the introduction of the topic “livelihood of women working in agriculture and vegetable vendors in the village of Nachinola, Bardez goa. It also talks about the role of Agriculture in livelihood, major vegetable crops in goa, major areas to obtain livelihood and population.

1.8.2. Chapter 2: I have reviewed the books, articles, journals through which the reader can understand the literature which is already existing. Further, I noted down the idea which signifies my study. It contains topics relevant and also highlights the author who has worked on those topics like livelihood, women in agriculture, feminization, employment in agriculture, decision-making, vegetable crops in goa, women vegetable vendors, and law-related topics.

1.8.3. Chapter 3: defines the methods that have been used to complete these studies, it includes tables, graphs, pie-chart which make the reader easy to understand. Interview, qualitative, quantitative methods, snowball sampling are being used.

1.8.4. Chapter 4: contains interviews of a total of 9 women farmers. Their socio-economic backgrounds, problems faced, and other matters like income, schemes, etc.

1.8.5. Chapter 5: contains interviews of a total of 5 women vegetable vendors. Their socio-economic backgrounds, problems faced, and other matters like income, schemes, etc.

1.8.6. Chapter 6: covers gender analysis of women farmers and vendors. Division of work done by men and women on the farm as well on the stall.

1.8.7. Chapter 7: finding of the study about various issues, the challenges they have to face. Through finding can identify what is to be done for betterment.

1.8.8. Chapter 8: Conclusion on overall research.

In the above introduction chapter, there are 5 sub-themes that have been covered which start with the content on India and then agriculture. It shows how vegetable crop production is important for farmers and the livelihood of people. My research focuses more on vegetable crop production in Nachinola village Goa, which is known as *Varve* and there are various crops that have been grown in this season. My focus is on women working in Agriculture in vegetable production and the way they handle all the roles and to know the gender division of work. The statistical data taken is according to the information provided from different sources and even panchayats, which is helpful to know the size of the population and the total area covered by the growth of vegetable crops. Most of the time paddy cultivation is taken as the only source of livelihood, but even vegetable cultivation is a source of livelihood for women in the village of Nachinola. The Glance of goa is added to know how the weather condition is favourable for growing vegetable crops and exactly where the place is situated. It also covers the 4 major types of livelihoods the people live for. My research also includes the women vegetable vendors who are getting their resources and living by selling vegetables at the roadside.

Women's way of living, managing work outside and at home, difficulties that they face while working, the double burden they face to earn this income, division of labour work at farms and vegetable shops, decision making, schemes they get, and the benefit they receive will be covered.

CHAPTER 2

LITERATURE REVIEW

2.1. Livelihood

In their study by Priyanka Vithoba Velip “shifting cultivation in Goa: livelihood and rights of women of the velip tribe” talk about the livelihood and rights of women. It focuses on the source of livelihood as kumeri cultivation from a gendered perspective and talks about the myths that might exist. It’s even said that shifting cultivation has different names in different countries and it differs from community to community and region to region. Whereas in Goa shifting cultivation is known as Kumeri Cultivation and it is referred to as an old-age occupation of velip community in canacona goa and in several parts of India, among the tribal community it is said to be common practice. In India, most tribal communities practice shifting cultivation as their livelihood. The author even focused on various laws and policies and their impact on women engaged in kumeri cultivation. (Velip, 2020)

The author looked for the role and relationship of velip women in age-old traditional occupations. She says as Goa being the smallest state in India, but rich in forest and many communities lived there for centuries, and due to the implementation of a new law in the forest how tribal community life got affected which was their age-old practice. She tried to bring awareness and give voice to an oppressed group, especially velip tribal women. Kumeri cultivation is the core of family needs. It even talks about various medicinal plants from the forest. (Velip, 2020)

As she compared her data with census 2011, even my statistical data will be taken from census 2011. This research paper gave me an idea to take the livelihood of women in my village as a topic as many women are engaged in agriculture as during the Covid pandemic times some of them started to sell vegetables as a means of livelihood.

The article by Christian Erni “Shifting cultivation livelihood and food security: new and old challenges for indigenous peoples in Asia ” talks about indigenous people having a rich and diverse culture that separates them from mainstream society. Indigenous people are treated as the poorest people in the world, and they are discriminated against, marginalized, and impoverished. But the traditional knowledge and practice of people make an important

contribution to the conservation and sustainable use of biodiversity. There has been the expulsion of people's traditional lands, rejection to access to natural resources, and access to the forest. They find it difficult even to make their ends meet where they have to make arrangements of cash to make up for the loss of resources and other educational purposes. But still, indigenous people get important livelihoods through shifting cultivation and tell how shifting cultivation was and still is necessary. There have been different changes may be because of government policies, laws, growth in population in the market through the introduction of cash crops. It talks about the dual economy where villages feel their livelihood becomes easier if compared to the past where dual economy exists in the form of sale of surplus vegetables, which did not exist before and it also gives importance to household food security. There is more need for improvising agriculture-based livelihood systems for better and proper food security. (Erni, 2015)

Indigenous people are overcoming new challenges and there is a need for external support to make use of new opportunities. There is a need for awareness-raising on indigenous people and their rights and capacity building on innovation for women and youth. (Erni, 2015)

“Women in Agriculture: A Review of the Indian Literature” by Nata Duvvury Discusses that Technological change and its impact on female employment in agriculture has come to be an important area of study in the context of the Green Revolution strategy. Only a few have tried to integrate the various dimensions of the impact of technological change on wages and earnings, access to productive resources, and overall changes in women's status measured in terms of nutritional levels, mortality level, and the sexual division of labour in agriculture. No attempt has been made to evolve methods to measure the intensity and productivity of women's work. Rural development programs have been an important strategy adopted consequently to the introduction of the new technology. In most of these programs, women have been an inconsequential element. They have talked about various factors like women in the labour force, the impact of technological changes on women in agriculture, government programs, and women and women and peasant struggles. The aim is to see in broader terms the impact of the commercialization process on employment, earnings, work intensity, and status of women. (Duvvury, 1989)

2.2. Feminization

“The feminization of Agriculture or the feminization of agrarian distress? Tracking the trajectory of women in agriculture in India” article says that the rising share of farm work in India is undertaken by women in India. Women’s social and economic roles are being questioned by the changing character of rural India. Feminization of agriculture has no mandatory relationship with indicators of economic empowerment, but several indicators of poverty are strongly related to women increasing participation in agriculture. It may be described as the Feminization of agrarian distress because agriculture adds to the already heavy work burden on most rural people as they have a house as well as fieldwork. It is being reframed as who might be considered as a “farmer”. Ownership of farmland among other things, decision-making power, and recognition of women's contribution in the public sphere has previously been seen primarily as a male concern. (Pattnaik et al., 2018)

The national commission of farmers shows an increasing number of women in agriculture working as helpers or taking care of land and men’s participation decreased from 1.5% to 0.5%. Female participation increased from 1.25% to 1.4%. Women from Scheduled tribe communities participated in the workforce at a higher rate compared to women belonging to scheduled caste and general caste. Even though women play an important role in agriculture as workers but do not have the right to agricultural property which leads to missing opportunities in productivity. Only 13.5% of property holding is in the name of women. In Goa, 23.3% is owned by women, and 18.0% operated by women cultivators. The participation of both men and women is decreasing, particularly men, and if women are declining because of their role as cultivators or responsible for decision-making. (Pattnaik, Lahiri-Dutt, Lockie, Pritchard, 2018)

2.3. Employment in Agriculture

“Employment, wages, and productivity in Indian agriculture” Article claims that Employment in certain sub-sectors like livestock, fishing, or forestry has declined and there is hardly any increase in agriculture employment during the 90s. In some states employment in agriculture is declining whereas in certain states it is increasing as push as well as pull factors are responsible for this fluctuating trend in agricultural employment. In agriculture, the share of female workers has increased at the aggregate level, though states are registering

a decline in the corresponding share. From certain states, there is also evidence of male workers being a lot more than female workers in agriculture. There is an increase in women's household decision-making more the increased family income which enhances their status in the society. Most of the females have concentrated on agriculture rather than manufacturing and community services. Wages in certain states like Punjab and Haryana remain higher than in many other states. The real wage in these states has decreased suggesting that increase of wage incommensurate with the increase in agricultural productivity cannot be sustained for long. (Jha, 2006)

2.4. Women in/and agriculture

In the book "*Women in Indian Agriculture: Study on Rice Cultivation*", Kanta Sabharwal talks about the role of women in agriculture that women play a particularly important role in the largest industry contributing to the source of livelihood for 70% of the country's population. About two-thirds of manual labor in farms is constituted by rural women. They provide almost 14-18 hours of productive physical labour every day connected with agriculture, allied, and domestic chores. She says that most of the time women's work are "invisible" where it is often assumed that men are farmers while women are farmer's wives and helpers. (Sabharwal, 2014)

It says that the focus of gender analysis should be on men's and women's reproductive roles. Men and women may work in the same field but perform different tasks such as land preparation by men and planting and weeding by women and various other tasks may be performed by all other family members. (Sabharwal, 2014)

It can be also learned that the work burden of women is heavier than that of men. Women in Cyprus, Jordan, Morocco, Lebanon, and Yemen may work anywhere from 11-16 hrs every day in agriculture and household (Anonymous, 2005b). In India, women work during the agricultural season for as long as 12-16 hrs, and time spent in farms varies from village to village according to caste, class, and social customs. Women are paid low wages not because of their productivity but due to ideology associating the female gender with inferiority. Men always prefer heavier and similar activities for which they get high wages where women continue to perform tedious and menial jobs. Women suffer a lot of health issues and there is poor access to health care. Most operations are done with traditional tools which may cause fatigue and body pain working in the same posture for long working hours. (Sabharwal, 2014)

From the study, it can be also found that most of the heavier work is done by the male such as digging or bund making whereas work done by females is irrigation, weeding, or putting fertilizers. My research will also focus on such kind gender analyses and the number of women farmworkers working in the fields of Nachinola village, and the amount of time spent by men and women. A similar table gender analysis will be taken in my research based on vegetable farm work. (Sabharwal, 2014)

The paper “Women and Agriculture: Closing the Gender Gap for Development” Cheryl Doss, discusses how to support gender analysis in agriculture and to see gender-specific ownership on agriculture resources if it is owned by males, females, or both. It gives guidelines for data collection and involves interviews with women farmers so that their voices are heard. Gender plays an important role, and it helps in increasing productivity and economic growth. It is important to consider both men and women while doing gender analyses, as it is not possible by just studying women’s behavior. In agriculture, there are lots of socially constructed roles and responsibilities that shape the decision-making of Agriculture. The decision of the work to be done depends on the gender and according to social norms about household responsibilities, availability of work, and how much earnings can be done. For example, for men and women workers of the labor market will differ. (Doss, 2013)

To increase and improve agriculture productivity there is a need to adopt new technology for economic growth. But most of the time gender is always ignored and left out. Another thing is if women are ignored or left behind if there is an adoption of new technology. The impact on men and women may differ based on changing policies affecting poverty. The definition of agriculture needs to be expanded to incorporate a discussion of gender analyses. (Doss, 2013)

While framing questions and while interviewing farmers one should take into consideration that it should not just focus on men, but it should also include women. A farmer can be anyone and the person who makes agriculture production and agricultural decisions. Women's contributions need to be identified and continued. Even if the family is headed by a female, then it does not reduce the chances of adopting new technology. There is a gender difference in agricultural productivity. (Doss, 2013)

It says that household surveys are most used to analyze agricultural decisions as household surveys are usually treated as a production and consumption unit. It makes it easier to analyze the range of decision-making, such as which crop to be grown, whether to or not to engage in off-farm labor, how much output to sell to purchase other items, or whether to send their children to school. This provides them with a better understanding of livelihood decisions but may have less information on certain crop production practices. There is a line between household and farmers survey because in a household survey it gives an understanding of household activities and interaction among them, and farmer's survey focuses on the particular crop which collects data on particular producing and marketing. It also underestimates women's ownership of assets which includes land and house. (Doss, 2013)

To support and to get proper gender analysis one needs to make sure that women farmers are interviewed, and their voices are heard and counted. The information should also include people involved in various activities such as decision making, landowner or manager and to reveal how there can be a change in the gender pattern in agriculture. For better economic growth and productivity there is a need to incorporate gender into the analysis. This relates to my project as my questionnaire is based on women and the type of gender role done by men and women in agriculture. (Doss, 2013)

2.5. Decision-making

“Role of women in Decision-Making process in Agriculture sector: A case study of District Fatehabad” Abhey Singh Godara, Usha Poonia and Usha Jyani says Decision-making is a Primary role that incorporates all the functions of family resource management. Rural women perform all the household duties, attending to farm labor, caring for the household, etc. Despite a lot of household duties, no recognition is given to her immense contribution. Women's involvement in the decision-making process of the household remains in a very low position as all important decisions are made by the head of the family or the male members as sometimes women are not provided with opportunities to get an education and they are unaware of their proper rights. They have less access to information about their rights. Most of the time women's suggestions do not get much credit in agriculture and important family matters. The main purpose of this study is to collect information regarding women's participation in the decision-making process related to the agriculture sector of the Fatehabad district of Haryana State. There is a need to motivate the females to have the proper

knowledge about their legal rights based on the results. Their need for education and workshops, extension lectures can work for the betterment of women. (Godara, Poonia, Jyani, 2014)

“Socio-economic condition of Agricultural women labour in Andhra Pradesh: A case study of Karimnagar district” article by Devender Dommati; Krishna Reddy Chittedi says that Women suffer from multiple burdens on their time due to their homemaking, child-rearing, and income-earning responsibilities. There needs specific attention regarding gender-sensitive farm and credit policies. India’s economic security is heavily dependent on agriculture. In terms of employment, it is the most important sector. Women have been active not just in crop cultivation but also in allied areas such as horticulture, livestock, and fisheries. A unique feature of female participation throughout India is that they are workers, labourers, cultivators, producers, traders besides performing all household duties which are considered as “Unproductive”. Studies show relating to women’s employment and labour utilization. It covers the review of different aspects such as women participation, concept, technology, cropping pattern, irrigation facilities, farm size, economic contribution, migration, landholding size, education, the burden of work, family income, workforce, seasonal variations, caste, and sex discrimination, etc. (Dommati & Chittedi, 2011)

2.6. Vegetable crops in goa

“Three decades of research on the vegetable crop in Goa” indicates further planning for increasing the production of vegetable crops in Goa. 60% of the total cultivated area is under horticulture crops but only 5% of the total cultivation area is under vegetable crops. It also covers the major crops in Goa with a seasonal pattern such as Kharif, Rabi, and summer. This article is linked to my research as I have taken a similar pattern and the major crops according to the season grown in goa. (Thangam et al., 2009).

2.7. Law

“Street Vendors (Protection of Livelihood and Regulation of Street Vending) Bye-Laws 2018” article talks about the law which is byelaw may be called as the corporation of the city of Panaji Street vendors (Protection of Livelihood and Regulation of street vending) Act2014. Thereafter the State Government framed Rules under the title “The Goa Street Vendors (Protection of Livelihood and Regulation of Street Vending) Rules, 2016”. It

extends to the entire jurisdiction of the Corporation of the City of Panaji. (THE CORPORATION OF CITY OF PANAJI, 2018)

An application for a Street Vending licensee shall be made not less than fifteen days in advance of the first date on which vending will take place (in case of existing Vendors within 45 days of these Bye-Laws coming into force). Only goods as listed on the license application are to be sold from the stall of a Street vending license holder. The application for a street vending license shall be attached with the copy of the EPIC/ Voter Election Card and Adhaar Card, failing which the application shall not be considered for issuing the license. (The Corporation of City Of Panaji, 2018)

According to village panchayat, vendors must follow certain protocols. They must take permission to seat as street vendors. But as many of the vegetable vendors were seating during the time of the pandemic, they were allowed to sit without paying rent or *SOP*. Even those who were seating from past years do not pay any rent. They were even not allotted with the specific place but only advised that they should not be the reason for traffic or other road issues. But 1 out of 5 vegetable vendors in my interview took permission from panchayat as she wanted to turn that stall into a moving cart.

2.8. Women vegetable vendors

“Socio-economic exclusion of vendors: An emerging issue of livelihood and rights” Mr. Vijay M. Gawas, paper discusses the implications of the new Act and Protection of livelihood of vendors to finalize whether such act will be included in the national mainstream. But at present in Goa, there are no such implications of various development policies, strategies, or programs during the successive five-year plan. The major problem faced by women vegetable vendors is that they are evicting a large number of women vendors as well as tribal women to adjust and to bring up shops in the Panjim market. All the vegetable vendors are considered illegal by the law, and they are forced to vacate the place. (Gawas, 2015)

In my study area it is not the same whereas in Nachinola this is not the same for women, but they are allowed to sit at a safer place.

For them, it is very difficult when the municipal and police administration creates a barrier, and even by collecting Tax rent, due to lack of awareness they are not aware of the scheme

and policy. However, it is not known to them because there is no law to protect the interest of the unorganized sector. The Goa legislative assembly has passed various acts related to the corporation of the city of Panjim but it is no specified act to protect the livelihood of local vendors. The law is ineffective to protect the interest of local vendors. The state has not prepared any schemes related to social security for vendors. (Gawas, 2015)

“Social and economic status of women Vegetable Vendors” the paper states that most of the women had adopted this vegetable vending is adopted by women after their marriage because it is their family business and it’s even a tiny business and required low investment. It is even revealed that OBC’s category dominates the vegetable vending business. Vending is the source for women of being self-employed which provides convenient service to society which is an important part of the informal sector. It is also found that literacy level is very low in women vegetable vendors and very few are having luxuries amenities. (Trivedi et al., 2020)

“Socio-economic condition of women vegetable vendors in Tiruchirapalli Town during Covid 19 period (March-June)” this paper aims to study the problems faced by women vegetable vendors during the lockdown period where they suffered lots of problems. Those who have pull carts could sell their products and due to government municipal authorities shifted their place of selling vegetables and due to which they suffer a lot. As businesses require low capital and fewer skills and whenever they want they can enter and exit into this business so many choose this as this occupation as a livelihood. The finding says that women street vendors need sufficient space, the threat of eviction, and the problem of security. Their economic condition is really unfortunate during this pandemic situation and requires plants to tackle them. It is said that 1000 is provided for vendors by the government during the lockdown, those who are having ration cards for some expenses, and which was not enough, but the same type of facility was not provided to the vendors on whom I did the survey. (Dr.T.Unnamalai, 2020)

CHAPTER 3

RESEARCH METHODOLOGY

3.1. Rationale of the study

If women had the same access to resources as men, the number of hungry in the world could be reduced by up to 150 million. (Danielle Nierenberg, Food Tank) including land, credit, education, and extension services as male farmers.

Livelihood is the need for everyone. My father being a farmer I got inspired by him and wanted to know more about it. Agriculture is the only thing through which we get our living, and this is how it relates to my research. As I saw many women working in the fields and even some as vegetable vendors, I thought of studying their livelihood and the challenges they are going through as women have a double burden on them. I even got inspired to study especially on women's livelihood because earlier I had attended the thesis presentation on “Shifting cultivation in Goa: Livelihood and Rights of women of the Velip Tribe” by Ph.D. Scholar, Dr. Priyanka Vithoba Velip which I found very interesting.

Double burden is when a person works for hours to earn money but also who is doing domestic unpaid labor. Both partners, men, and women have paid jobs, but women often spend more time than men on household chores and caring work such as cooking, cleaning, and child-rearing or caring for sick family members. It has become like a traditional gender role that has been accepted by society over the years.

The research focuses on the important role played by women in agriculture, especially by growing local vegetables and those women who are selling vegetables as vegetable vendors on the street, waiting the whole day in every season. It will help to understand that the rural livelihoods are the key area to understand the gender behavior and is either limiting or expanding women's and men's access, option and choices or decisions regarding the use of resources. Many of the women are agricultural farmers, and their work is not recognised.

Through my research, I want to bring out and make people understand that not just cultivation of rice or wheat crops is important but also growing of vegetables is important which is not

widely talked about or spoken about. In Nachinola village there are many vegetable growers from October to February which later extends to May which is also known as *VARVE*. When I asked a person about women doing varve, he said that there are no such vegetable growers in Nachinola. But when I found out from one of the vegetable growers, she gave me names of others too. From this, we get to know that even women are growing different kinds of vegetables, but they haven't been recognised. Only the final products are seen and considered. There are more Women vegetable vendors compared to men's. Even if a vegetable vendor is a man, then he sits for a few hours or a limited period but women vendor seats for all day, only women are the one who sit all-day to earn income for their livelihood. Even if men do visit a farm or at a vegetable stall then there is a difference in the work done by them which is either type of masculine or power or sometimes maybe a decision where there is limited work. For women, they have to be from start till the end. A number of women have chosen growing vegetables and selling vegetables to earn their source of income.

3.2. Feminist Research Practice

Women's social and economic roles are being questioned by the changing character of rural India. Feminization of agriculture has no mandatory relationship with indicators of economic empowerment, but several indicators of poverty are strongly related to women increasing participation in agriculture. It may be described as the Feminization of agrarian distress because agriculture adds to the already heavy work burden on most rural people as they have a house as well as fieldwork. It is being reframed as who might be considered as a "farmer". Ownership of farmland among other things, decision-making power, and recognition of women's contribution in the public sphere has previously been seen primarily as a male concern.

The national commission of farmers shows an increasing number of women in agriculture working as helpers or taking care of land and men's participation decreased from 1.5% to 0.5%. Female participation increased from 1.25% to 1.4%. Schedule tribe women participated in the workforce at a higher rate compared to women belonging to scheduled caste and general caste. (Pattnaik et al., 2018)

3.3. Objective of the Study

1. To Study the Socio-economic background of women working in the fields of Nachinola Village.
2. To study the challenges faced by women workers in fields and as vendors.
3. To examine the role of women in decision-making power related to opting measures to increase production and selling activities.
4. To study the prevailing scheme of government given to women workers and if these schemes have benefited them in any way.

3.4. Methodology

3.4.1. Sources of data

The sources of data include both primary and secondary data. Primary data is collected by taking in-depth interviews and through mobile communication from vegetable farm workers as well as vegetable vendors. The secondary includes Articles, Journals, Books, and websites/internet.

3.4.2. In-depth Interview

To get in-depth interviews semi-structured questionnaires were framed as per Appendix (II). All the interviews were carried out at respondents' homes, workplaces, mobile phone and on the vegetable vendor's stall. To start the interview there was a need to build a rapport and later continue with the questions. But before all this consent letter was provided for each interview seeking permission to click pictures and recording audios so that they are satisfied, and their privacy is maintained. The consent letters were in regional language as well as in English. Interviews were conducted according to their convenient timings.

3.4.3. Study tools

In this study, I have used quantitative as well as qualitative methods.

3.4.4. Qualitative method

In this, the data was collected through in-depth interviews, noting down points, clicked pictures-videos, and recorded audios. Data collected for making graphs are collected in tabular format to understand Gender division of labour.

3.4.5. Quantitative method

Under this method, things will be expressed through graphs and statistics based on the available data which is collected. Data has been collected from village panchayat and from census 2011.

3.4.6. Convenient sampling

As there were only 5 women vegetable vendors seating, it was convenient to ask them permission and take their interview.

3.4.7. Snowball sampling chain

As I did not know other women farmers personally, I got the names of other women farmers from the first women I approached. The chain continued where I was able to get names from each other and could collect a total of 9 women farmers.

3.4.8. Study sample size

The respondents were selected from Nachinola village only. I was able to interview a total of 9 women vegetable growers and 5 vegetable vendors.

3.4.9. Duration of the study

The study has been conducted for a period of approximately 6 months, till April 2021.

3.4.10. Precautionary measures

While doing the interview all precautionary measures were taken like wearing a mask, keeping Social Distancing, and using Sanitizer as it was the time of covid-19 situation.

3.4.11. Ethical Issues

Permission was given to take interviews, pictures, audio, and video. And they were told that the details shared will be confidential and only for Research Purpose. The Respondents agreed to keep the same names.

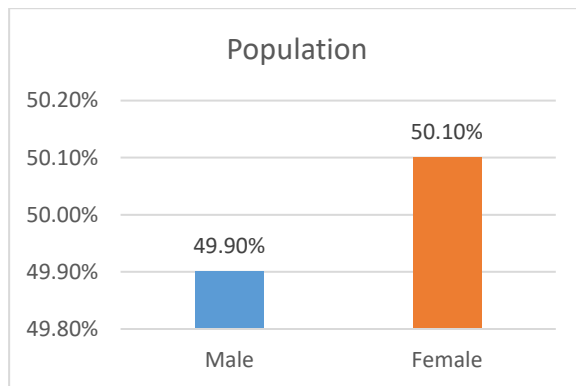
3.5. Population size of village Nachinola

Table 2: Population size of village Nachinola

Particulars	Total	Male	Female
Total no. of households	645		
Population	2725	1360 (49.9%)	1365 (50.1%)
Child (0-6)	252 (9.2%)	144 (57%)	108 (43%)
Schedule caste	103(3.7%)	51 (49%)	52 (51%)
Schedule tribe	45 (1.6%)	24 (53%)	21 (47%)
Literacy	2414 (88.60%)	1236 (51.2%)	1179 (48.8%)
Total workers	1164 (42.7%)	792 (58.2%)	372 (27.2%)
Main workers	836 (71.8%)	-	-
Marginal workers	328 (28.1 %)	179 (55%)	149 (45%)

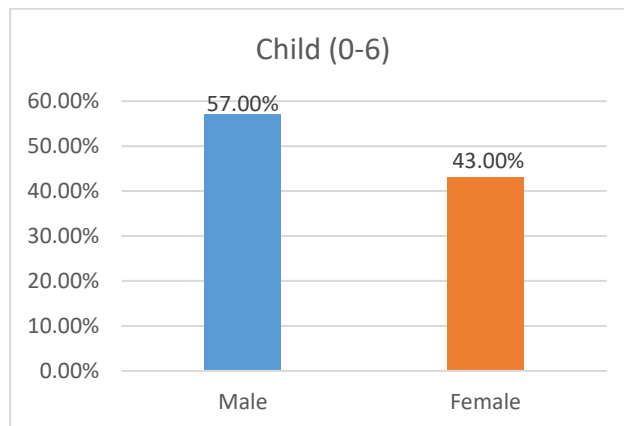
Source: Panchayat and census data 2011 (Calculations done on available data)

GRAPH 1: Overall population



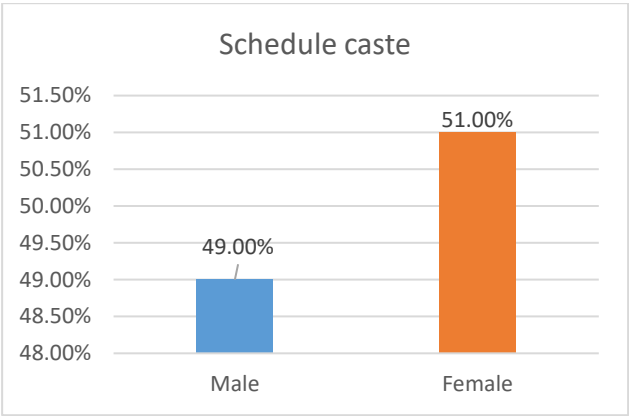
The above graph no. 1 represents the total population of Male and Female 2725. The Male population is 49.90% and Female population is 50.10%.

GRAPH 2: Children between (0-6)



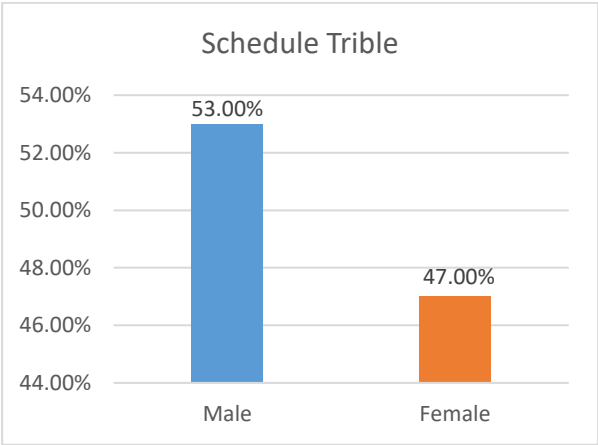
Graph no. 2 shows Children between (0-6). The Male children between (0-6) is 57% and Female children between (0-6) is 43%.

GRAPH 3 Schedule Caste



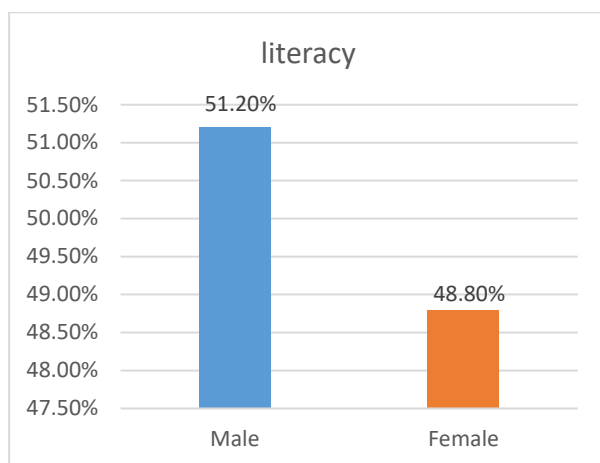
In Graph no. 3 the population of Schedule Caste estimates 49% of male and 51% of female.

GRAPH 4: Schedule Tribe



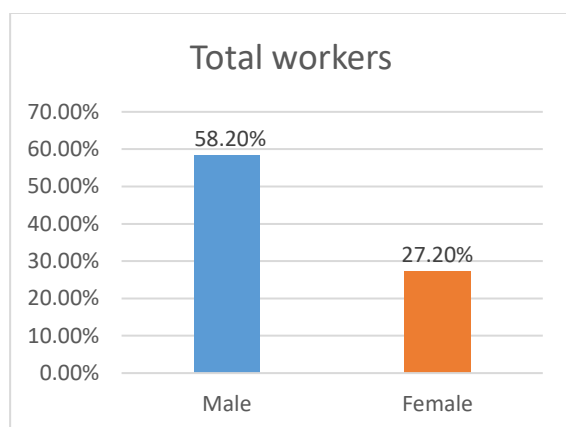
In Graph no. 4 the population of Schedule Tribe estimates 53% of male and 47% of female.

GRAPH 5: Literacy



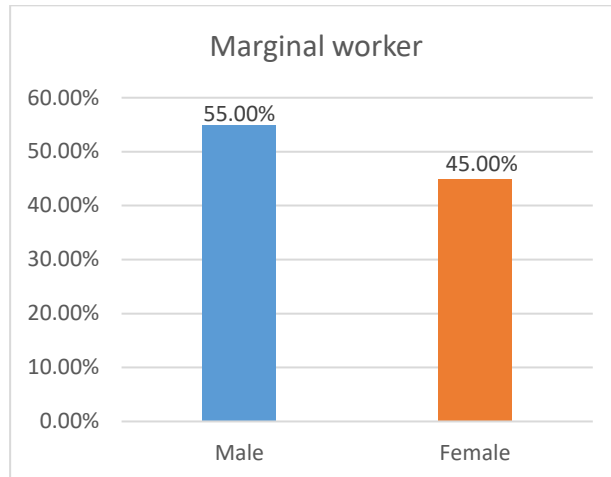
According to census data 2011, the Literacy rate of Male is 51.20% and Female is 48.80%.

GRAPH 6: Total workers



In Graph no. 6, Total Male workers are 58.20% and Female 27.20%.

GRAPH 7: Marginal workers



The Graph no. 7 the represents Marginal workers, where Male Marginal workers is 55% and Female is 45%.

3.6. Limitations

Firstly, the sample size is very small, and the study is conducted in a small village of Nachinola. The data is limited, and results could not cover the border theoretical framework. As it was a very hectic situation in this pandemic, I was not able to take all 15 interviews as was planned. Due to time constraints, there is a limited collection of data.

Some of the women did not allow to click their pictures because they were shy and one of the women did not even talk as she was scared of talking which reduced one of my interviews.

As I interviewed vegetable vendors at their workplace it was very disturbing because there was lots of noise from vehicles and even dust issues.

3.7. FIELD EXPERIENCE

Doing this research was an enriching experience for me. Earlier I had done interviews with direct questionnaire methods in past studies but during this fieldwork, as I did in-depth interviews it was a kind of new experience. Where I got to interact with many people even some of them whom I didn't know before. It is good to see that they are making agricultural

convenient services to people. I also got to know more information which may be helpful for me. I got to visit different vegetable farms and learned how to use Traditional Lati as well from the farmers. It is difficult but I enjoyed doing it. I had said to all the respondents that I will be changing their name for privacy purpose but they gave me permission to use their name. I felt really good that they got involved and had no problem revealing their name, as they said that it for my research study purpose.

CHAPTER 4

WOMEN IN AGRICULTURE IN NACHINOLA

4.1. Socio-economic background of women working in the fields of Nachinola Village.

A total of 9 women farmers was interviewed. The majority of the women farmers belong to the age group between 45 – 70 years. All the farmers are literate, but the education level differs where 8 women farmers are literate from 2nd standard to 8th standard, whereas only 1 farmer has completed her education till 12th standard. All the respondents said that they belong to the caste of Bhandari Samaj. All responders are from the Hindu religion. Almost all women are engaged only in Agriculture. Most of the women farmers are Married i.e., 8 women farmers are married, and 1 farmer is a widow.

Most types of vegetables grown in fields of Nachinola are, chili, onion, Ivy guard (Tindly), Okra (bhindi), Brinjal, Amaranthus (tambdi bhaji), vegetable cowpea (vali bhaji), Radish (melee), sweet corn, Knol Knol (knab), Cucumbers(tovshe), bitter gourd (Karli), Ridge gourd (ghosale), Pumpkin, mustard seed plants, Dill(Shepo bhaji).

Figure ii: Local vegetables



Source: Nidhi Vaingankar (during field visit on 11/February/2021)

Figure iii: Local vegetables



Source: Nidhi Vaingankar (during field visit on 11/February/2021)

Figure iv: Dill (shepo bhaji)



Source: Nidhi Vaingankar (during field visit on 6/February/2021)

From the overall 9 interviews it was found that only 1 woman farmer was owning the land they cultivate remaining 8 of their farming lands were in the names of their in-laws or land taken on lease.

7 women said that they started working farms after their marriage as some had no other option than to continue their family business in agriculture. And some were not able to do any other work to get a source of income other than farming. When I asked them about the schemes there are no special schemes for vegetable farming like Kisan Credit card is there for rice cultivation. For buying they have to spend everything from their pockets. Whereas during

rice cultivation they at least get Rs 6000 for a year plus can take a loan if required at a very low rate on that card.

Many women receive the Griha Aadhar scheme as they said its benefits them when there is a shortage of money. But some women do not get the benefit of this scheme because their husbands get the Senior Citizen Pension scheme where the amount is transferred in their husband's account and women do not get benefit from it. One of the women gets Dayanand's social security scheme.

Women say that when they work on a time basis on other farms, they are given different work, and hence they are paid different wages. If men do the work, then it Rs 500-600 per day and for women, it is Rs 300-400 per day.

1) Reema Rama Naik

My name is Reema Rama Naik, aged 54 and studied till 4th standard. I belong to Bhandari samaj, religion Hindu. When I was 21 years old I was married and now it's been 33 years since my marriage and I have 4 kids. I started this work as it was our field and I would grow different types of crops like chilies, ladyfingers, radish, many types of green vegetables due to which I thought to continue with this work or living. I learned and started doing this work from my childhood at my mother's place and still, I continued with work after marriage as I could not go for any other profession. "I get help from my husband as we both ask each other and do the work. When there is the support of each other, work goes very well". If I would go into other fields and once their work is done, they would come into our fields of work as exchange (*badlek – Exchange of services for services*). The field property is still in the name of my in-laws. I visited the field 2 times. Most of the seeding I get is from the market because when I try to regrow then it gets spoiled. I get the scheme Griha Aadhar but do not get the Kisan credit card scheme as the farm is not in my or husband's name to avail scheme and even need to cultivate certain hectares of land.

2) Reshma Rohidas Naik

My name is Reshma Rohidas and I am 55 years old. I have studied till the fifth standard and belong to Bhandari Samaj. The only source of income I have is through agriculture. I am married and have 2 kids. I never thought of doing other business as I could not perform and only do agricultural work and even at home, no one is there to earn a good source of income.

From the day I am married I have to do more of this work but before marriage, I would just visit a farm with my mother and not do much work but after marriage, I had to work more. I work in other fields as well. When I go to another farm to work, I get ₹400 per day and if compared to men they get more like ₹500 to ₹600 per day. “I think that men do more work than us. I receive the Griha Aadhar scheme. I get fertilizer from the government which is provided only for those who have farms and it’s only given during rice cultivation.

3) Pramila karapurkar

My name is Pramila karapurkar, aged 55. I studied till 7th standard, belong to Bhandari Samaj, Hindu Religion and I’m married. I thought of starting this work because we had land to cultivate crops and I didn't have other work to do so by cultivating vegetables I get a source of income which helps me in daily life. I started working on farms after my marriage. For the past 24 years, I've been working as a farmer. The land ownership is in the name male person. We hire laborers on the farm when there is a need and when lots of work is there like weeding otherwise, I manage to do it. There is a scheme for farmers and which we avail is Kisan credit card and it's only usable at the time of cultivating rice crop, it is not beneficial during vegetable season. I get the Griha Aadhar scheme.

4) Sarita Suryakant Salgaonkar

My name is Sarita Suryakant Salgaonkar, age 48, qualified till 8th standard and belong to OBC, Bhandari Samaj, and Hindu. I am married and I am a farmer. I started doing this farming work because it has been existing for many years in my family, after marriage I had to continue this with my husband and other family members. The land ownership is in the name of a female. We hire limited laborers and if I hire more laborers then I must spend more on them than what we get. I must pay those Rs 500-600 per day. I do not get any scheme from the government for farming, instead for all machines and fertilizers I must pay. I get the Griha Aadhar scheme.

5) Mamta Salgaonkar

My name is Mamta Salgaonkar, age 45, studied till 8th standard. I belong to OBC, Bhandari Samaj, and Hindu. I am married and my Occupation is a farmer. After a few years of my marriage. The land ownership is in the name of a male person. During the vegetable season, I visit at least two times in the field i.e. morning and evening. More time is spent in the

evening. I do not higher labors as it costs too much, instead of which my other family members manage like my daughter. I do not get any scheme as being a vegetable farmer.

6) Anuradha Hanumant Vaigankar

My name is Anuradha Hanumant Vaigankar and I am 60 years old. I studied till the 7th standard. I belong to OBC, Bhandari Samaj, Hindu. I am a housewife as well as a farmer. It has been 35 years now that I am working in this field. And all my family members were in this work for the past many years like my in-laws and my husband and they do not get involved in other work than farming. So, I had to continue farming with my husband for extra wages to get financial support for me and my family. There was pay in wages when we were going to another farm to work. “I feel that because there is a difference in the type of work and hard work. Women are given work like weeding or transplanting”. The owner would not give the hard type of work for women. Maybe they were thinking “women are not capable of doing that work. Men’s work is given only to men and no one”. Due to Less hemoglobin, there is no proper sleep at night, but with the same condition and with tiredness I must go to the farm, as work is to be completed. I have a Kisan credit card. I get Griha Aadhar Scheme.

7) Laxmi shirodkar

My name is Laxmi shirodkar and I am 70 years old. I studied till the 2nd standard, belonging to Bhandari Samaj, Hindu. My occupation is Agriculture, and I am a Widow. I did not know anything about farming, and I was working in a factory. I could not continue with the factory work as my mother’s house is far away and I could not travel long distances. “If I had gone to mother’s place for work purposes then people would have thought that I left my husband and so I started farming. People's mindset was not good at that time and even now though”. Before I would sell in the market but now that I am older, I sit on the roadside to sell things that are outside my house for which traveling is not needed. I have done 3 jobs at a time in a day such as managing the house, farm work, and selling. Now I handle everything financially and take care of my own. For women, I must pay rs300 and if men then have to pay Rs 700 because they do dig, cutting, or breaking and other work and women’s work is weeding or planting”. I get the Dayanand’s social security scheme for being a widow and no other than this. But I get fertilizers given by well-wishers.

8) Resha Vaigankar

My name is Resha Vaigankar and I am 55 years old. I studied till the 4th standard, belonging to Bhandari Samaj, Hindu. My occupation is Agriculture. It has been 15 years since I have been working in the field for our livelihood. By 9:00 am I go into the field, do all things like weeding, watering, plucking vegetables, and then return home by 12:00. After I have food at 4:00 pm I go to the market to sell vegetables and I go on every alternate day when vegetables are available. When I would go to work on other farms when it's time for rice cultivation for women, it's rs400 per day and for men, it's rs800. "First of all they are men and they are given particular work, and women can't do work as they do. That particular hard work is only given to men". The morning I was not able to even get up due to back pain but I took the tablets and I went, did irrigation of the crops because without bending irrigation cannot be done (Maag vodap – Irrigating with the help of Plate by bending) and without continuous bending work, cannot be done. I get the Griha Aadhar scheme and no other scheme is available.

9) Ujwala Dabhale

My name is Ujwala Dabhale and I'm 60 years old. I studied till 12th standard, belonging to Bhandari Samaj, Hindu. My occupation is Agriculture farming. I am married and I have 1 child. It has been 32 years since I have been working in the field as it is in our culture for long years, so I continued with it and I was even doing it before my marriage. Land ownership is in the name of a male person. I visit 2 times in the field, total timing comes to 6 hours and if there is more work then time may also increase accordingly. While farming there is a shortage of water. I have to carry water in pots from my house each and every time. There is no pond or water pump in the field. I have to take many rounds to irrigate the crops. In schemes, I get a Kisan credit card benefit only at the time of rice cultivation. In the rainy season. I get a Griha Aadhar card benefit.

4.2. Finding from the above interviews.

1. How did they think of starting this work: 1 woman out of 9 started doing farming because they had their land to cultivate, and they do not want it to leave empty and they did not have other work to do. This helped them in getting the source of income for their daily life.

1 out of 9 started farming as she could not perform other work and only do is agricultural work, and no one is there to earn a good source of income. If they were earning well, she would have not been working in the field. From the day she is married she must do more of this work but before marriage, she would just visit a farm with her mother and not do much work but after marriage, she had to work more.

3 out of 9 women farmers doing farming because it has been exciting for long years. Where they continued working with their in-laws or husbands and now, they handle most of the work alone as they got to learn. Some of them started to get extra wages.

2 farmers out of 9 started farming before marriage and she continued with it even after marriage. They learned it from their childhood. By growing vegetables and other things, it is beneficial for self-consumption as well as for selling and getting wages to get required resources and she even believes that it's in our culture for long years. Working as a farmer and grow different vegetables like chilies, ladyfingers, radish, and many types of green vegetables as well.

2 out 9 farmers started doing farming only after their marriage because one could not continue with her previous job and even due to long-distance and had to learn farming from in-laws her husband and other was motivated by her friend to do as she was knowing how to grow crops which she had left after her kids were born.

2. Number of years women involved in farming: 2 women farmers out of 9 said that they are been working as a farmer for 12 years and 15 years, respectively. 3 women said they completed 24 years, 25 years, and 27 years, respectively. 4 women out of 9 are working for 30, 32, 35, 42 years, respectively.
3. Managing household work as well as fieldwork together: Almost all 9 respondents said that to manage all together then they get up early in the morning and do all the household work. Between 8:00 am to 9:00 am they visit the farm. Sometimes there is no time to have proper food. Men visit once a while, but women have to visit twice a day and every day during the vegetable season. 2 of them sits to sell vegetable in the market on alternate days.
4. Growing vegetable in own field or time-based worker: 5 women said that they only grow vegetable in their field and do not work as a time-based worker. 2 out of 9 women are working in their farm as well as working as a time-based worker in other farms. 2 responded that many years ago they were working in own as well as In other farms but

at present they are working only in their farm because their age is getting older and they are not able to work with that capacity because there are problems which they face as full-body pain, legs swelling, can't bend, but in their field, they, however, have to work because it is their only source of living.

5. Land ownership: from the interviews taken it was found that out of 100% only 1% of woman farmers had farmland ownership.
6. Number of times visit in the field: 7 farmers said that they visit at least times a day in the field to work i.e. in the morning and evening and spend almost 6 – 7 hours in a day. 2 of them said that they visit once or twice a day's depending upon the work to be done and as in the evening 1 has to go in the market to sell vegetable on alternate days.
7. Monthly income: during the vegetable season, 3 out of 9 farmers said they earn up to rs 1000-2000 for 1 or 2 weeks. 2 of them said that they earn between Rs 2000 to 6000 monthly only during this season. For 1 farmer there is no monthly income as such because they do not sell vegetables on daily basis so for a week it comes up to rs500 – 1000. 1 of them gets rs 10,000 as their monthly income. 2 of them did not reveal their incomes but said that from the earnings they latest save and keep rs 500 for future use after spending on the required resources. (For many, their earning are from vegetable growth depends on the quantity and quality of crops grown. Sometimes crops are not grown properly which get spoiled. 2 of them dint not reveal the income, but by spending on whatever resources are needed, from that at least 500 they keep as saving for future use.
8. Managing seedlings: most of the farmers manage to get seedlings from their farms. They collect the seeds dry them for 11-12 days and pack them, store them in a dry place for future use for the same good quality of seeds. it should not be opened in middle but directly when it's to be used. 1 of them said that half seeds they grow plus they get it from the Agriculture Department. 1 out of 9 farmers gets seeds from the market because when they try to regrow them it gets spoil.
9. Problem faced due to lockdown: Majority i.e. 7 women farmers had to face a problem due to lockdown where it was time to grow vegetables but could not visit much and there was a delay in growing. The vegetables were not sold due to which there was wastage and loss, and many were not able to go to the market to sell the vegetables or to give to any vendor. Few kept it in from of their house to sell where only a few got sold. Some could not visit in farm due to the weather condition, there were lots of insects (jiv – small insects which destroys the corps), and water got settled which spoiled many things and

dint grow properly. Some tried to sell vegetables in their neighborhood. 1 woman said that when she had kept vegetables on the house door to sell, the police came and started to carry all the vegetables to take away, but later it was solved. 1 farmer said that during the pandemic, many people visited our farming place and purchased it, as all markets were closed. All vegetables got sold quickly.

10. Hiring of laborers: 3 women said they would go to work on exchange term (*badlek - Exchange of services for services*) which means that there would be no exchange of money, instead she would go to work in the farm who had come to work in their farm. 2 farmers hire labors at the time of the vegetable season for weeding or transplanting and they do not hire men because they charge more. 2 of them hire labors only if lots of work or a heavy load of work to be done. 2 of them do not hire labors during the vegetable season as they charge higher, and they manage by themselves, but they hire during at the time of rice cultivation season.

Figure v: Women Labours working in the Farm



Figure vi: Women Labours Working in the Farm



Source: Nidhi Vaingankar (during field visit on 23/June/2021) (06/February/2021)

Figure vii: Transplanting of onion saplings



Source: Nidhi Vaingankar (during field visit on 06/February/2021)

Figure viii: LATI (traditional equipment to pull out water)



Source: Nidhi Vaingankar (during field visit on 25/march/2021)

Women farmers irrigating crops in two different ways

Figure ix: Irrigating crops with pot the help of Pot



Source: Nidhi Vaingankar (during field visit on 25/March/2021)

Figure x: Irrigating with the help of a plate.



Source: Chaya karapurkar (23/June/2021)

Figure xi: Women farmer pulling out water with the help of Lati



Source: Nidhi Vaingankar (during field visit on 23/June/2021)

Figure xii: Ponds in farms made during the vegetable season



Source: Nidhi Vaingankar (during field visit on 06/February/2021)

CHAPTER 5

WOMEN VEGETABLE VENDORS AT NACHINOLA

5.1. The Socio-economic background of women working as vegetable vendors in Nachinola Village.

A total of 5 women vendors were interviewed. 1 of the vegetable vendors is in the young age of 22 years old, other 4 vendors are between 35-65 years. 4 out of 5 vendors have education levels between the 4th to 8th standard and 1 is currently studying B.C.A. Majority of vendors belong to the Bhandari Samaj caste. All responders are from the Hindu religion. 4 of the women are local vegetable vendors and 1 out of 5 is a vendor on Goa state horticulture shop. 3 vendors are married, 1 is unmarried and 1 out of 5 is a widow.

All women started the business on their own. They started with little but later they grew their business very well. All the women vendors are willing to continue to invest more in the same business. There is the gender division of work involved but most of the time only women work on the stall, men only visit for 1 to 1 and half hours. Some women find it fine to be there on the stall for the whole day. As their husbands help them to make set up of all the products and getting vegetables from markets.

Problems that are faced such as in heat, the head starts paining and there is lots of dust. There is always competing with other street vendors. There is insecurity that they might be told to get up as they don't have proper permission (eviction). Lack of facilities such as toilets, lighting, and even sometimes hygiene in the surrounding area.

1) Sangeeta Surbha Nagvekar

My name is Sangeeta Surbha Nagvekar and I am 40 years old. I studied till the 5th standard and belonged to Hindu, Bhandari Samaj. My occupation is only in Agriculture, I sit as a vendor on the roadside. I'm married and have 2 kids.

My main aim of starting this business as a vendor was, as I had grown lots of vegetables soon before lockdown started. But when the lockdown happened, I could not go to the market to sell it, so I thought of selling vegetables by myself during lockdown by seating as a vendor.

I and my daughter both have to manage at home. Getting up early in the morning, cooking, and then going into the field to do farm work like watering, plucking vegetables, washing them, etc.

The morning visit is from 7:00 am to 2 pm then again from 4 pm to 9 pm. Sometimes profit is between Rs. 1000 to Rs. 2000 weekly. There are no such schemes for vendors, but she is availing Griha Aadhar scheme.

She says that “only because her husband is helping her, she could sit there.”

2) Gayatri Shirodkar

My name is Gayatri Shirodkar. I am 35 years old and studied till 4th standard and belong to the Hindu religion. As my husband's financial condition was not stable, I had to start with this business as a vendor. So, I thought that seating as a vendor will be better and will be easier to get resources at home whenever needed. I started this work in the past 5 months during the lockdown. I have not taken any permission from Panchayat. I visit regularly at 8:00 a.m. then go home at 1:30 for lunch then again, I visit at 4:30 and return home at 9:00 pm. My husband helps me a lot and because of him, I can do this work. I buy fresh vegetables from village farmers and whatever is more needed I get it from the market. But most of the vegetables are from village farmers. There are different problems to face during this work such as customers just ask rates and do not buy any vegetables many of the time. Even if my husband is working it is not sufficient to get our basic living and even he was removed from the work. I own the shop and sit there the whole day. My husband comes just for half-hour to settle everything and later he goes.

3) Archala Kerkar

My name is Archala Kerkar, 22 years old, currently studying B.C.A and belong to Hindu Religion and I'm not married. For the past 8 years, we have been growing vegetables through which we get our income. As there is no other way of earning an income, my mother and I thought of starting this business as a vendor, as selling vegetables to other vendors to sell it would not keep us with much money.

As I am studying, I would sit for half-day and the remaining day my mother would continue sitting to sell vegetables. For the past 8 years, we have been in this business. We try to grow

vegetables ourselves. Where I sit is exactly the place side by road which creates lots of dust and when there is any construction of road, we have to keep on moving this has created a problem. Even according to the sun rays, I shift by a full load of vegetables and even tables and chairs from one side to another. There was no such scheme for vegetable vendors, nor did we get any benefit from the government for a few losses.

4) Rukmini vithoba khandolkar

My name is Rukmini vithoba khandolkar, aged 53, studied till 7th and belongs to Hindu, Bhandari Samaj. My occupation is as an agricultural vendor. I started this business because Instead of sitting idle at home and even in the house some income should come and this business I started from a very long back which will count to a total of 30 years. In the morning I visit at 6:00 am and return at 7:00 pm, sometimes even 8:00 pm. All these years I was not having permission but this year I have taken permission from the panchayat as I was to turn this stall into a moving cart because now I can't carry or keep it again and again. Later on, I can just pull the whole cart and take it back as the house is nearby. I'm not paying rent (sopo – Payment of Rent for Stall) yet as they didn't tell me. So I spent almost 11 to 12 hours on this vegetable stall. Per day income depends on the sale of vegetables, sometimes ranging from Rs 500 or Rs1000. I do not grow vegetables but half I take from local vegetable farmers and markets. Sitting the whole day there is fatigue, I feel like fainting and in the rainy season, I have to manage accordingly.

“She was not aware of the scheme provided for the widow so I gave her the name. She told me she will be finding out about it.”

5) Sunita Naik

My name is Sunita Naik, aged 65, studied till 8th standard and belongs to Hindu, Bhandari Samaj. My occupation is working as a part of a Goa state horticulture shop and I'm married. I had no other work to do and someone suggested I fill in the form of horticulture. I thought with this I will get some income in my hand, children go to work and it will not be good to ask money from them again and again. Per-day income varies and it ranges from Rs 100 to 600 and sometimes very low. This shop has completed 5 years. I do not grow any vegetables. I get them from Goa state Horticulture corporation ltd and some I get from the market and even take from local farmers. I even can't take profit from customers as there are rates written

on the board as per the government. When I take vegetables in the full load I get commissions sometimes rs800 to Rs 1000. I do not receive Griha Aadhar because my husband receives a senior citizen pension scheme. In each family, only one person can get the benefit. I do not benefit from it anyway.

5.2. Findings from the above interviews.

- Starting of this business: 2 of the women became vegetable vendors during the lockdown time. One had excess vegetables which were grown by her for selling and the other women husband's financial condition was not stable as he lost his job due to pandemic, so she set as a vegetable vendor. This was better and be easier for them to get income. 1 said that she had no other way of earning income, so she and her mother started to sell vegetables. 1 of them said that instead of seating idle she should do some work for earnings. 1 out of 5 was suggested to open her horticulture shop.
- Handling all work together: almost all of them said that they get up early to cook and then visit the shop at 7:00 am. Sometimes their kids and husband stay at home when they are in the stall. Sometimes they get tiffin from home at lunchtime and have it over there.
- Permission from Panchayat: majority i.e. 4 of them said that till now they have not paid any rent for that place and have not asked for compulsory NOC. 1 of the horticulture vendors have the permission.
- Hours a day: all the women said that they visit at 7:00 am and windup at 8:00 pm. Sometimes time may exceed 9:00 pm when stock is reaming. Total hours come to 11 to 12 hours.
- Earnings per day: daily income depends upon the number of vegetables sold per day where income differs every day. On average there are Rs 500 to 600 per day.
- Months/years completed for business: following are months/years for past years they are working. 5 months, 1 year, 5 years, 8 years, and 30 years.
- Managing to get vegetables: 2 of them grow then self and sell those vegetables. 3 vendors buy vegetables from local farmers and get few from the market.
- Problem due to lockdown: Due to the lockdown situation, there was a lack of finance, so this was a great idea according to them to get financial help.
Some vendors had positive responses where from customers because customers were able to get eatable at that exceedingly difficult time even though the prices were very

high. Vegetables would get sold faster as markets were closed. There was a scare that they might get the infection. There were a lot of crowds which was difficult to handle.

Figure xiii: Vegetable Vendors



Source: Nidhi Vaingankar (during field visit on 11/February/2021)

Figure xiv: Vegetable Vendors on the street of Nachinola- Aldona main road.



Source: Nidhi Vaingankar (during field visit on 11/February/2021)

Figure xv: Different types of Vegetables and Fruits sold



Source: Nidhi Vaingankar (during field visit on 11/February/2021)

CHAPTER 6

GENDER ANALYSES

6.1. GENDER ANALYSES OF FARMERS

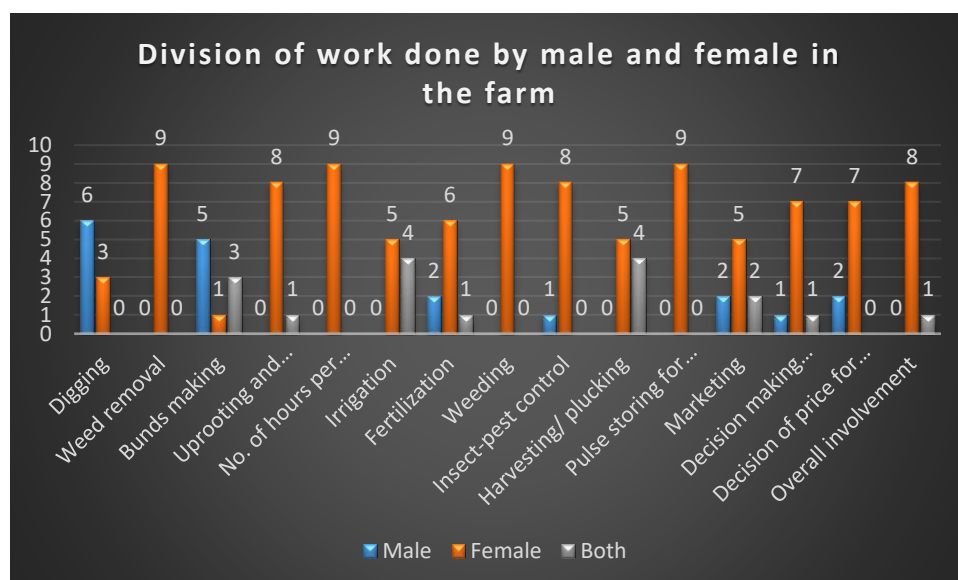
The below table shows a Gender-wise comparison of numerous fieldworks done by males, females, or both in the field. The table includes the process of cultivation in order which are carried out during vegetable farming. Through this table, we can easily find out the division of work done by male, female, or both. This was asked at the interview. Based on the table below the graph is made to make detailed analyses on work done.

Table no. 3: Division of work done by Male and Female on the farm.

Sr.no	Fieldwork	Female Dominate	Male Dominate	Both
1	Field preparation 1. Digging 2. Weed removal	3 (F) 9 (F)	6 (M)	
2	Bunds making	1 (F)	5 (M)	3 (B)
3	Uprooting and transplantation of seeds	8 (F)		1 (B)
4	No. of hours per day(most)	9 (F)		
5	Irrigation	5 (F)		4 (B)
6	Fertilization	6 (F)	2 (M)	1 (B)

7	Weeding	9 (F)		
8	Insect-pest control	8 (F)	1 (M)	
9	Harvesting/ plucking	5 (F)		4 (B)
10	Pulse storing for future	9 (F)		
11	Marketing	5 (F)	2 (M)	2 (B)
12	Decision making about the type of crop to be grown	7 (F)	1 (M)	1 (B)
13	Decision of price for selling products	7 (F)	2 (M)	
14	Overall involvement	8 (F)		1 (B)

Graph no.8: Division of work done by Male and Female on the farm.



Source: Data Collected during Field work

The above graph indicates the Division of work done by males and females on the Farm. It can be seen that men do work like digging and bunds making. 3 women do the bunds making. Irrigation most of the time is done by both by helping each other. Whereas other work such as weed removal, uprooting and transplanting, fertilizer, insect pest control, pulse storing, decision making about the type of crop to be grown, and decision of price is more done by women. Plucking of vegetables is done by both. Most of the time on the farm is spent by women which comes up to 6 to 7 hours per day. . Thus, we can say that the above graph shows the involvement of women more in farms than men for their livelihood and hard work in order to get resources. All work required strength but when it comes to doing certain work, there is mostly a difference in work. As per the above table and graph, most of the digging work is done by men.

When I asked them, what do they do not dig at the farm as well. They said that “for a long time it’s only done by men. We are mostly involved in doing other farm work”. Even when they are going to other farms to work, they are mostly given weeding or transplanting.

6.2. GENDER ANALYSES OF VEGETABLE VENDORS

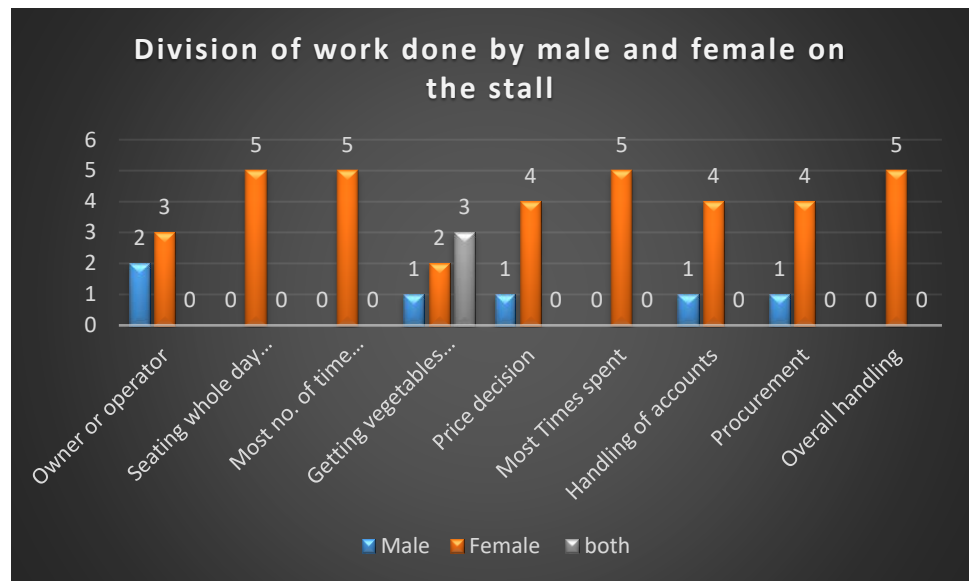
The below table shows a Gender-wise comparison of various work-related to vegetable vendors, stalls, and management by males, females, or both. The table includes all the procurement work as well as other responsibilities related to selling vegetables. Through this table, we can easily find out the division of work done by male, female, or both. This was asked at the interview. Based on the table below the graph is made to make detailed analyses on work done.

Table no. 4: Division of work done by Male and Female on the vegetable stall.

Sr.no	Vendors	Female Dominate	Male Dominate	Both
1	Owner or operator	3 (F)	2 (M)	
2	Seating whole day on the stall	5 (F)		
3	No. of time most visit on a stall	5 (F)		
4	Getting vegetables from the market	2 (F)	1 (M)	3 (B)
5	Price decision	4 (F)	1 (M)	
6	Most Times spent	5 (F)		
7	Handling of accounts	4 (F)	1 (M)	

8	Procurement	4 (F)	1 (M)	
9	Overall handling	5 (F)		

Graph no. 9: Division of work done by Male and Female on the vegetable stall.



Source: Data Collected during Field work

From the above Table and graph, we can find that maximum work is done by females and minimum work is done by males. We can see the owner of the shop 2 are male and 3 female, seating whole day on the shop are all 5 females, most visits are done by the female, getting vegetables from the market is 1 male, 2 females and 3 both, price decision is mostly done by female i.e.,4, whereas 1 male takes the decision. Female spends most of her time in the workplace which comes up to 11 to 12 hours a day. Handling of accounts is done by female and male handles is 1. Procurement is done by 4 females and 1 male. So, from all the above points we can see that overall handling is done by females.

Figure xvi: Weeding (removal of weeds)



Source: Nidhi Vaingankar during field visit

Figure xvii: Drying of seedlings and chilies



Source: Nidhi Vaingankar (during field visit on 29/march/2021)

Figure xviii: Pulling out water



(25/march/2021)

Figure xix: Digging and making Bunds



(06/February/2021)

Source: Nidhi Vaingankar during field visit

CHAPTER 7

FINDINGS

A total of 14 interviews were conducted with women farmers and vendors from the village of Nachinola. 9 interviews were taken of women farmers and 5 women vendors. Both groups of people have different types of managing styles in day-to-day life and face different challenges.

7.1. Analysis – Women in Agriculture (Farmers)

A. Challenges faced by women farmers.

There are different type of issues and obstacles that women farmer faces such as lack of access to land, financing, education, agriculture training, markets, suitable working condition, and equal treatment. The biggest barrier is land rights. Women have no control over land and they even have extremely low decision powers.

- **There is a lack of ownership and control over the land by women**: As per the overall 9 interviews taken. Only one woman had land ownership among all, due to no ownership of land, there is a lack of identity for the women farmers. Women do not get their land rights.
- **Wage difference at work**: there is a huge difference in the gender pay gap. Many women farmers are engaged in unpaid subsistence labor within farms owned by male members of the family. Even when women would go to work on other farms there would be a pay difference between men and women depending upon the work. Such as a woman would get Rs 200-400 per day and for men, it is between Rs 500 – 800 per day so there is a huge pay gap.

When I asked them, what could be the reason for this, their reply was “she insisted saying no, men are anyways bigger than women. Whoever the men maybe, but the women are always lower than men.” From this, we can see that how such things are there in our mind and many of them believe it and I think we need to change it.

She even said that” from past many years that people have said it and it’s been continued. (dadlyank muthin haadun ani bailani vodin haadun kennat pavchina) men are men, women are always lower than her husband, any amount of work you do.

- **Low literacy:** low literacy became a barrier for them because of financial conditions or poverty and for some not willing to study and for few remain behind in taking care of everyone and everything. Due to lack of education, training, and knowledge, they missed out on better information and to get connected with other services.
- **Dual responsibility of family and farm:** women farmers have the responsibility at home as well as the farm. As per the responses they get up early in the morning, mostly at 5:00 am and do all the household work, and then visit the farm. Sometimes ignoring their meals, they try to feed other family members. They visit early in the morning and work till evening. Cooking, cleaning, caretaking becomes a job for her where she does not get any help.
(After doing so much work and taking the responsibility it can be seen that women's work is not recognized, even though they can do all kinds of work on the farm, but they are only given specific work, like weeding or watering but that also require hard work but still, there is pay difference. When a woman does household work there is no pay and even when she goes to other farms extremely low wages are given compared to men.
- **Availability of sources at the farm:** they said that they must use traditional tools for farming, and they don't use machines. Some don't have ponds to get water easily, so they have to take many turns to fill the pot and irrigate crops. Any of them don't use the latest tools. Women perform the un-mechanized task and perform multiple tasks, which adds more burden on them.
- **Health problem:** there are different health problems faced such as due to old age their low hemoglobin level due to which there is no proper sleep, day by day body pain increases. Due to no proper food sometimes, there is weakness. Other health issues like back pain, neck pain, and even cold. Continues working in mud and water leads to getting cold and cracks on the skin. With the same condition and with tiredness they must work on the farm. While doing work there is high heat, due to which there is head pain, tension if vegetables are not sold then it gets spoiled and no proper income. One of them said that she was not even able to get up to do any work because of back pain but she had to take the tables and went as work had to be completed without bending irrigation cannot be done.
- **Water for irrigation:** in most of the farm's water is pulled off from pond through (lati) by men and water is irrigated for crops by a woman. The problem arises when women must bend full time while irrigating and do it with small plates due to which there are

back problems. Even there no water pumps installed. 1 of them irrigates crops through the pipe and 2 out of 9 have a water pump installed in their field.

B. The prevailing scheme of government given to women workers.

- **Griha Aadhar scheme:** Out of total farmers, 8 of them get the benefit of the Griha Aadhar scheme. 1 widowed farmer gets the benefit of the Dayanand's social welfare scheme.
- 3 of the women farmers said that they avail Kisan credit card scheme, but the card is beneficial only during rice cultivation and not during the vegetable season. 4 out of 9 women said that they do not have Kisan credit cards because either they don't have their land, or they don't have certain hectares area of the farm.
- These schemes are most beneficial in their day-to-day life and it helps them when they need to get anything or if sometimes there is a shortage of money in hand.

7.2. Findings (Vendors)

A. Challenges faced by women vendors.

Problems that are faced such as in heat, the head starts paining and there is lots of dust. If vegetables are left, then it's consumed by themselves or thrown out. Sometimes customers just ask rates and do not buy any vegetables. There is no other work than this to get their living and must continue with it, in whatever situation as this is the only source of income.

Sitting the whole day there is fatigue, sometimes feels like fainting and in the rainy season, I must manage with making a shelter. Bargaining is a problem where customers sometimes want to take it for a very low rate.

As they sit side by road which creates lots of dust and when there is any construction of road, they must keep on moving. Even as the sunrays move, they shift their place due to heat and sunrays. Every day keeping on moving is difficult.

Sometimes customers prefer good quality, but I can give only what is available. When anything remains then it is consumed or given at a low rate on the next day.

B. The prevailing scheme of government is given to women workers.

Almost all said that there are no special schemes for vendors. But they get another scheme benefit. The vendor of horticulture gets a commission per kilo of buying vegetables from the government corporation. 1 out of 5 vendors gets the Griha Aadhar scheme.

2 of them do not get the Griha Aadhar scheme because their husband gets the benefit of the senior citizen pension scheme. 1 of them does not get any scheme benefit because their marriage registration is out of goa.

There is a PM street vendor's AtmaNirbhar Nidhi scheme which was launched in June 2020 aimed at the pandemic. It is a micro-credit facility. But many are not aware of it which provides loans up to Rs 10,000 with a low rate of interest for a period of one year.

(When I took the interview of vendors, they didn't have to go through such a procedure. They were allowed to sit without any NOC or *SOPO*. They were even not allotted with the specific place but only advised that they should not be the reason for traffic or other road issues. But 1 out of 5 vegetable vendors in my interview took permission as she wanted to turn that stall into a moving cart.)

CHAPTER 8

CONCLUSION

Rural women are the major contributors to Agriculture. Women comprise about 43% of the agricultural labour force in developing countries and globally. We can see how men and women spend time on farms or stalls. According to the study of the division of labour done in this research, it can be seen that the contribution of physical labour by women exceeds that of men, and it also includes a high amount of unpaid household responsibility related to preparing food, taking care, and other household chores. The contribution of women towards food production and Agriculture is clearly significant.

Even though women can do all kinds of work on the farm, they are provided only with specific work, and they are often paid 4 times less than men, sometimes even for the same work. They make a comparison that work needs strength and is only given to men. When there is a need for labour most of them hire a women labourer because their charges are less compared to men. I think work should be given to women if she is willing to do it and she should not be treated weak so that even they have the right for the same pay as men.

Even if you are a well-educated person, there is no shame in being a vendor where the girl is doing a good job by working side by side while doing her studies. For vendors, there should be at least some kind of scheme which will help them or cover the loss which they suffered.

All women are not getting their rights in terms of availing schemes like the husband is getting a senior citizen pension scheme then-wife does not get Griha Aadhar scheme. There is a need for change and all women should get the benefit from such schemes. Most of the women farmers find it beneficial from the amount they receive through this scheme. They withdraw it and use it in their daily lives.

As many of the farmers do not have their own land, they have to pay rent, by giving the products grown on the farm like mostly dried chilies to the owner. Where their quantity gets decreased and the amount to be sold gets less. There is a need to be a better understanding of gender roles in agriculture and the need to change over time in response to new opportunities.

From the data analysis, it shows that the vegetable vending business and farming are mostly done by the OBC category than any other. Some of them started working in this business after their marriage because it their family business. Where ST and SC communities would just be called for weeding in other farms, and many do not have their family farms. They are mostly involved in doing traditional Crafts. These crafts are also useful for farmers such as bamboo baskets, brooms, etc.

Government should provide good quality seeds, fertilizer, pest controls, and even machinery and there is a need to pay proper attention to the farms, which may be of vegetables or rice cultivation. They should try to give some amount of money that vendors and farmers had to suffer due to different problems like change in weather, lockdown or pandemic, cyclones, etc. Women farmers and workers in agriculture and allied sector be recognised and registered farmers and be given social security benefits such as health care and old-age pensions, etc.

Women farmers and vegetable vendors are a particularly important part of the informal sector. They not just provide the source of self-employment but also provide affordable and convenient service to society.

APPENDIX

I. Consent letter

I.A. Consent letter in English

“Livelihood of Women working in Agriculture and Vegetable vendors in the village of Nachinola Goa”.

Consent to participate in research.

I _____ have been informed that this study is being conducted by Nidhi Vaingankar, Student of Women’s Studies, Goa University for her MA dissertation.

I voluntarily agree to participate in this research study.

I agree with my interview being Audio-recorded, video-recorded.

Signature of research participant with Date.

I.B. Consent letter in Konkani

"नासनोळा गांवच्या, शेतांत काम करपी आनी भाज्यो विकपी बायलांची

उपजिविका"

सोंदप्रक्रियेंत वाटेकार जावपाखातीर मान्यताय

हांव _____ जी सोंदप्रक्रिया, निधी दिगंबर वांगणकर, अस्तूरी अभ्यास, गोंय विद्यापीठाचें विद्यार्थी आपल्या पदव्युत्तर शिक्षणाचो प्रकल्प घडोवन हाडटा त्याबद्दल ताणें, म्हाका पुराय माहिती दिल्या. हांव आपखोशेन ह्या प्रकल्पांत वाटेकार जावपाक हयकार दिता. हाव म्हजी मुलाखतीची, ध्वनी(ऑडिओ) वा चित्रीकरण(व्हिडिओ) करपाक मान्यताय दिता.

सोद प्रकल्पात वाटेकार जातल्याची

सय आणि तारीख। _____.

II. QUESTIONNAIRE

II. A. Questionnaire for farm workers

- 1) Name
- 2) Age
- 3) Educational qualification
- 4) Caste
- 5) Religion
- 6) Occupation
- 7) Marital status
- 8) How did you think of starting this work?
- 9) For how long are you working in this field?
- 10) How are you able to manage household work as well as fieldwork together?
- 11) Do you grow vegetables in your field or work as a time-based worker in other fields?
- 12) Who has the land ownership of this Land? Male or Female.
- 13) How many times do you visit the field and the number of working hours daily?
- 14) What is the monthly income you earn after working in the field? Or if you work as a time-based worker then how much wages do you get for that particular time?
- 15) How do you manage to get seedlings for future vegetable growth?
- 16) What difficulties or challenges do you face in doing this work?
- 17) What problems did you face due to this pandemic?
- 18) Do you hire labourers for help in your field?
- 19) Is there any scheme/ benefits given by the government for farmers? If yes do you avail them?
- 20) Division of work done by males and females in the field / Gender-based assessment of work.

Sr.no	Fieldwork	Female Dominate	Time spent	Male Dominate	Time Spent	Both
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1	Field preparation 1. Digging 2. Weed removal					
2	Bunds making					
3	Uprooting and transplantation of seeds					
4	No. of hours per day(most)					
5	Irrigation					
6	Fertilization					
7	Weeding					
8	Insect-pest control					
9	Harvesting/plucking					
10	Pulse storing for future					
11	Marketing					
12	Decision making about the type of crop to be grown					

13	Decision of price for selling products					
14	Overall involvement					

II. B. Questionnaire for vendors

- 1) Name
- 2) Age
- 3) Educational qualification
- 4) Caste
- 5) Religion
- 6) Occupation
- 7) Marital status
- 8) How did you think of starting this work/ business?
- 9) How you handle both household work as well as staying the whole day on the stall as a vendor?
- 10) Do you have permission from Panchayat for sitting as a vendor?
- 11) How many hours a day do you spend at your workplace?
- 12) How much do you earn per day/month?
- 13) For the past how many years you are in this business?
- 14) How do you manage to get vegetables? Do you grow yourself or are purchased from the market?

15) What challenges are you facing while selling vegetables?

16) What problems did you face due to this pandemic?

17) Is there any scheme/benefits given by the government for vegetable vendors? If yes do you avail them?

18) Division of work done by male and female on the stall/ Gender-based assessment of work

Sr.no	Vendors	Female Dominate	Time spent	Male Dominate	Time Spent	Both
1	Owner or operator					
2	Seating whole day on the stall					
3	No. of time visit on a stall (most)					
4	Getting vegetables from the market					
5	Price decision					
6	Time spent					
7	Handling of accounts					
8	Procurement					

9	Overall handling					
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REFERENCES

- Thangam, M., Ramachandrudu, K., Ladaniya, M. S., Mathew, P. A., & Ramesh, R. (2009). Three decades of research on vegetable crop in Goa. *Dr.V.S.Korikanth Imath Director ICAR Research Complex for Goa Ela, Old Goa - 403402, Goa, India*, 39.
- Christian Erni. (n.d.). Shifting Cultivation, Livelihood and Food Security New and Old Challenges for Indigenous Peoples in Asia. *The Food and Agriculture Organization of the United Nations*, 434.
- Dommati, D., & Chittedi, K. R. (2011). Socio-Economic Conditions of Agricultural Women Labour in Andhra Pradesh: A Case Study of Karimnagar District. *International Journal of Business Economics and Management Research*, 2(3), 21.
- Doss, C. (2013). *Women and Agriculture: Closing the gender gap for development*. 22.
- Dr.T.Unnamalai. (2020). Socio Economic Conditions of Women Vegetable Vendors in Tiruchirapllai Town during Covid 19 Period (March - June). *A Blind Review & Refereed Quarterly International Journal, Volume VIII* (29), 93.
- Duvvury, N. (1989). Women in Agriculture: A Review of the Indian Literature. *Economic and Political Weekl*, 24, No. 43 (Oct. 28, 1989). <https://www.jstor.org/stable/4395526>
- Gawas, Mr. V. M. (2015). Socio-Economic Exclusion of Vendors: An Emerging Issue of Livelihood And Rights. *Scholorly Research Journal for Interdiciplinery Studies, VOL-3/21*, 1175.
- Godara, A. S., Poonia, U., & Jyani, U. (2014). *Role of Women in Decision-Making process in Agriculture Sector: A Case Study of District Fatehabad*. 4(2), 9.
- Jha, B. (2006). *Employment, Wages And Productivity In Indian Agriculture*. https://www.researchgate.net/publication/254213024_Employment_wages_and_productivity_in_Indian_agriculture
- Pattnaik, I., Lahiri-Dutt, K., Lockie, S., & Pritchard, B. (2018). The feminization of agriculture or the feminization of agrarian distress? Tracking the trajectory of women in

- agriculture in India. *Journal of the Asia Pacific Economy*, 23(1), 138–155.
<https://doi.org/10.1080/13547860.2017.1394569>
- Sabharwal, K. (2014). *Women in Indian agriculture: Study on rice cultivation*. Mittal Publications.
- Thangam, M., Ramachandrudu, K., Ladaniya, M. S., Mathew, P. A., & Ramesh, R. (2009). Three decades of research on vegetable crop in Goa. *Dr.V.S.Korikanth Imath Director ICAR Research Complex for Goa Ela, Old Goa - 403402, Goa, India*, 39.
- The Corporation of City Of Panaji. (2018). *Street Vendors (Protection Of Livelihood And Regulation Of Street Vending) Bye-Laws 2018*. The Corporation Of City Of Panaji.
[Http://www.ccpgoa.com/pdf/Bye-laws-Street-Vendors-Regulation-Rev.2.pdf](http://www.ccpgoa.com/pdf/Bye-laws-Street-Vendors-Regulation-Rev.2.pdf)
- Trivedi, S. M., Bhatt, J. D., & Bharodia, C. R. (2020). Social And Economic Status Of Women Vegetable Vendors. *Guj. J. Ext. Edu*, 31(2), 122.
- Vithoba Velip, P. (2020). *Shifting Cultivation In Goa: Livelihood & Rights Of Women Of The Velip Tribe*. 300.
- Acharya, S. (July-December 2006). Sustainable Agriculture and Rural Livelihoods*. *Agricultural Economics Research Review*, 217.
- Imath, D. (2009). Three Decades of research on Vegetable Crops in Goa. *ICAR Research Complex for Goa*, 46.
- Kapil, S. (2021, 01 29). *Agri share in GDP hit 20% after 17 years: Economic Survey*. Retrieved from downtoearth: <https://www.downtoearth.org.in/news/agriculture/agri-share-in-gdp-hit-20-after-17-years-economic-survey-75271#:~:text=The%20share%20of%20agriculture%20in%20GDP%20increased%20to%2019.9%20per,cent%20was%20in%202003-04.>
- Nachinola Population - North Goa, Goa*. (n.d.). Retrieved from Census Population 2021 Data: <https://www.census2011.co.in/data/village/626682-Nachinola-go.html>
- Directorate of agriculture. (n.d.). *State agriculture infrastructure development plan (saidp) under rkvy – raftaar (state – goa)2018-19 to 2019-20*.

Nachinola, GoaHolidayHomes. (n.d.). Retrieved from GoaHolidayHomes:

<https://www.goaholidayhomes.com/information/nachinola.html#:~:text=The%20name%20Nachinola%20comes%20from,the%20street%20of%20dancing%20girls.>

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