



**Research Article**

**COMPARATIVE ANALYSIS OF SHG AND NON-SHG WOMEN BADI WORKERS IN KEONJHAR DISTRICT OF ODISHA**

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**ABSTRACT**

The objectives of the paper are to analyse the cost, price and profit of Badi Making and to provide the comparative analysis between SHG and Non-SHG Women Badi workers in Keonjhar District of Odisha, India. Phula Badi constitutes the ingredients like black gram with till seeds in the back side of badi. Badi is fried or roasted and consumed as a side-dish with some primary dish. There is significant variation at 1 per cent level in cost of making badi in five study areas. This is because the quality of Phula Badi varies from area to area and worker to worker. It is found that there is significant variation in profit per kg of badi among five study areas. The average sale price of Badi for SHG workers is Rs. 214.33 whereas it is Rs.210.03 for Non SHG workers. The average quantity of badi per day made by SHG Badi workers is 8.02 kg whereas it is only 6.64 kg for Non SHG Badi workers. Since SHG workers are provided training through ORMAS, they are more skilled in badi making which helps in producing higher quantity of Badi per day. It is concluded that the women in Keonjhar district should join in SHGs to earn higher profit.

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**INTRODUCTION**

Badi making is an important productive activity in Keonjhar district of Odisha for the self help groups working in the business. It is a specialized activity of women badi workers attached to SHG in the district. Women Badi workers are major players in Keonjhar district of Odisha with respect to their major contribution to economic development in the district as well as in other states. The development of women badi workers is directly related to economic growth as well as revenue generation for the workers and also for the district. With the growing impact of women badi workers, they keep themselves self-employed. In order to reduce poverty and to increase their standard of living and well-being of their family, these women badi workers makes a strong contribution in upliftment of the badi making business. To uplift the badi making business, various promotional measures as well as incentives are provided by the district authority from time to time. Today the role of women badi workers don't seem to be confined only as a mother/ homemaker but the role of women badi workers is much more than what it was previously. The women badi workers play different roles in society in the social hierarchy simultaneously. The Women badi workers have got priority in women entrepreneurship after 1991 industrial policy where they got special training programmes to initiate their business.

providing entrepreneurship training to the women badi workers. The women badi workers also getting technical schemes as well as development of badi making business for setting up of various units at district level from MSME.

Women Badi workers in Keonjhar district getting benefits through Special programmes like training programmes and capacity building of women badi workers and its beneficiaries from the SHG's. Also regular skill development and training programmes are being organized for more value addition to DWCRA and Self Help Groups production for quality packaging, standardization of various ingredients and also the pricing of badi to develop the marketing knowhow and technical skills among the badi workers. There are many suitable and relevant technologies that are being displayed at training and technology development centres (TTDC's) in the Keonjhar district for better exposure of the badi workers. The concept of SHG's and women badi workers in Keonjhar district makes them independent business women with increasing their social and economic status. Women Badi workers with SHG linkage in Keonjhar district develop the habit of increasing loans and savings inculcated from their badi making business. SHG's introduced the concept of self-monitoring in a phased manner with the aim to make women totally own their movement and institutionalize its sustainability through networking. SHG makes the women badi workers happy to utmost level in the society which is becoming habituated to savings and creates a means for deciding power within the family. Self-confidence and Self-

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reliance attitude uplift the women badi workers who are linked to SHG.

### **Phula Badi in Keonjhar District of Odisha**

Phula Badi constitutes the ingredients like black gram with till seeds in the back side of badi. Badi is fried or roasted and consumed as a side-dish with some primary dish. The 'phula badi (flower shaped badi)' prepared here is so famous that it is gaining popularity beyond the boarder as well. This particular black gram dumpling marked its beginning in the age old days which is very popular in the tribal district. On the pious occasion of many festivals and especially on makar sankranti badi are offered to the deity in the Jagannath temple in Keonjhar district. Many badi workers today sell badi in huge quantities and it is being sold in many shops and also at trade fairs. Today it is estimated nearly 850 women badi workers from badi making business earn their livelihood in Keonjhar district. The entire Badi making business now has taken a long jump in commercial sense and many more women now interested in the Badi making. More interesting to hear is that badi's gaining its craze in countries like china and USA by middlemen. The demand for Keonjhar phula badi is everywhere in India. Apart from other industries, the phula badi business has gained the status of MSME's in the district. Local people of Keonjhar district gives a token of gift whosoever comes as a guest in the district area. "Phula Badi" (Flower shaped handmade black gram dumpling) produced in Keonjhar is famous for its crispness and taste which are also have very delicate and fragile characteristics. In some parts of Keonjhar, women are producing Badi (handmade black gram dumpling) for earning additional livelihood.

A comparative study tries to clarify the behavior patterns of a certain group or a certain culture and its validity for humanity. This comparative study helps the researcher to ascend from the initial level of exploratory case studies to a more advanced level of general theoretical models. It is a study in which a participant is randomly assigned to one of two or more different groups. This chapter deals with the comparative analysis between SHG and Non-SHG Badi workers with their opinion survey relating to socio-economic status. The study was conducted in five areas of Keonjhar district of Odisha. Women Badi workers are engaged in Badi making business. There are significant differences in decision making abilities between SHG and Non-SHG Women Badi workers. The decision-making level of SHG women badi workers appeared leading edge over Non-SHG women badi workers indicating the impact of SHG on women badi workers decision making process. It is observed that the women badi workers who have joined Self Help Groups are able to get loan from Subhashree badi federation or bank where as non-SHG badi workers avail loans from local money lenders. Therefore, the comparison between SHG and Non-SHG women badi workers is an important study which can investigate the role of SHG in promoting badi making activities.

### **Review of Literature**

Swami Doss and Manjula Devi (2013) in their study identified that heavy competition, inadequate marketing strategy, shortage of raw materials and shortage of finance are the problems faced by SHG members. Kappa Kondal (2014) writes on "Women Empowerment through Self Help Groups in Andhra Pradesh, India" in International Research Journal of Social Sciences. Women participation in Self Help Groups

have obviously created tremendous impact upon the life pattern and style of poor women and have empowered them at various levels not only as individuals but also as members of the family members of the community and the society as whole. They come together for the purpose of solving their common problems through self-help and mutual help. The more attractive scheme with less effort is —Self Help Group (SHGs). It is a tool to remove poverty and improve the women entrepreneurship and financial support in India. The present paper confines itself to study of Women Empowerment through the Self Help Groups in Andhra Pradesh. The main objective of this paper —Impact of Self Help Groups on Women Empowerment in Gajwel Mandal of Medak District in Andhra Pradesh. In the present study, simple statistical tools adopted. Based on the analysis of women empowerment through self help groups in Gajwel, the major findings of this study there is a positive impact of Self Help Groups on Women empowerment in Gajwel Mandal of Medak District in Andhra Pradesh.

Anju and Raju (2014) in their study identified that lack of supportive network, financial and marketing problems are the major problems for rural women entrepreneurs. Sivakumar and Kavithasri (2017) in their study ascertained that lack of formal education, family responsibilities, lack of communication skills, heavy competition are the problems faced by SHG members. Vinodha Devi (2017) in her study identified that scarcity of raw materials for production, followed by shortage of power, insufficient finance for promoting and running an enterprise etc. are the problems faced by women entrepreneurs. Therefore the present attempt is made to analyse the various problems. PriyankaKumawat and VishakhaBansal (2018) in their study ascertained that inadequate training facilities, problems in marketing the products, poor support from financial institutions etc. are the problems faced by SHG members. Poornima and Ramanaiah (2019) in their study identified that no stable price for the products manufactured, lack of practical knowledge and marketing problems are the prominent problems faced by SHG Entrepreneurs. Renu Pathak *et al.* (2019) in their study identified that group conflict, lack of interest in taking responsibility among SHG members and lack of motivation are the serious problems exists.

### **The following are the broad objectives of the paper**

- a. To analyse the cost, price and profit of Badi Making in Keonjhar District.
- b. To provide the comparative analysis between SHG and Non-SHG Women Badi workers.

The present research study is based on Primary data which are collected through questionnaire method. The field study is conducted in Dhenkapur, Atopur, Old Town, Kashipur, Dimbo villages of Keonjhar district. The data are collected from 400 Women Badi workers of Keonjhar District. Samples are selected by using simple random sampling method. Keonjhar district is selected purposively among the 30 districts in the state of Odisha because badi making by the members of self-help groups are found in this district. The data are collected from 400 Women Badi workers of Keonjhar District out of which 200 are members of SHGs and other 200 are not members of SHGs for comparative analysis in the study.

**Social Status of SHG and Non SHG Badi Workers**

Women SHG Badi workers have wider social networks and greater mobility as compared to non SHG Badi workers. SHG Badi workers have the potential to increase their members' ability to hold public entities which are accountable and their rightfully demand. A comparison of social status between women SHG and Non-SHG badi workers is presented below in Table-1.

**Table 1** Comparison of social status of SGH and Non SHG Women Badi Workers

Particulars	Range	SHG badi workers		NON SHG badi workers	
		Total	Percentage	Total	Percentage
Age Group	18-24 years	0	0	0	0
	25-30 years	50	25	160	80
	31 and above	150	75	40	20
TOTAL		200	100	200	100
Marital Status	Single	9	4.5	12	6
	Married	169	84.5	178	89
	Widowed	22	11	10	5
	TOTAL	200	100	200	100
Caste	General	108	54	30	15
	SC	21	10.5	70	35
	ST	13	6.5	10	5
	OBC/SEBC	58	29	90	45
	TOTAL	200			
Family Structure	Nuclear Family	134	67	40	20
	Joint Family	100	200	100	
TOTAL		200	100	200	100
Card Holders	BPL	52	26	155	77.5
	APL	148	74	45	22.5
	TOTAL	200	100	200	100
Educational Distribution	Illiterate	70	35	140	70
	Matriculate	120	60	50	25
	Higher Secondary	10	5	10	5
	Graduation & Above	0	0	0	0
TOTAL		200	100	200	100

Source- Compiled from Primary Data

From the Table-1, in the age group category among 200 SHG Badi workers 150 belongs to the age group of 31 and above whereas from 200 Non- SHG Badi workers 160 belongs to the 25-30 age group which shows that in the SHG part, the Badi workers are more experienced and veteran in badi making activity. Likewise, for the marital status, 169 out of 200 respondents are married from SHG and 178 out of 200 respondents from Non- SHG also falls into the same married category. This shows irrespective of SHG and Non- SHG badi workers the women are married which tells that these women badi workers do not depend on their spouse as during field survey they told that all most all of their husband do not do work so they are independent in generating income from this badi making activity. As far as caste structure is concerned, out of 200 respondents 108 belongs to general caste from SHG whereas out of 200 respondents 90 belongs to OBC/SEBC from Non- SHG area. It also shows that there are a very a smaller number of women badi workers who belongs to ST/SC from both SHG and Non- SHG areas. Interestingly it gives a contrast picture from the comparative analysis of SHG and Non- SHG Badi workers that in the SHG areas, 54% respondents are general caste whereas in the Non-SHG area, 45% respondents are OBC/SEBC caste. In a contrast picture with respect to family structure of badi workers, out of 200 respondents of SHG Badi workers 134 belongs to nuclear family whereas out of 200 respondents of Non-SHG Badi workers, 160 belongs to joint family. With respect to card holder's category, out of 200 respondents from SHG Badi workers, 148 belongs to APL category whereas out of 200

respondents from Non-SHG Badi workers, 155 belongs to BPL category. So, it is clear from the table that the comparative analysis in respect to card holders of women badi workers in SHG and Non-SHG category also gives a contrast picture too as it shows in SHG category 74% (APL) are somewhat better off than Non-SHG category as it is 77.5% (BPL). With respect to Educational distribution, out of 200 respondents from SHG Badi workers, 120 are matriculate whereas out of 200 respondents from Non-SHG Badi workers, 140 are illiterate. So, it shows that SHG Badi workers are little bit educated with respect to Non-SHG Badi workers. It will be not wrong in saying that in financial decision or any matter related to finance or transaction, the SHG badi workers have a tendency of taking quick financial decision as well they are little bit aware of any monetary help by the Govt. to the SHG members, trade fairs in the locality, marketing of the badi than the Non-SHG Badi workers.

**Comparison of Economic Status**

A comparison of Economic status between women SHG and Non-SHG badi workers is presented below in table2.

**Table 2** Comparison of Economic Status of SHG and Non SHG Women Badi Workers

Particulars	Range	SHG badi workers		NON SHG badi workers	
		Total	Percentage	Total	Percentage
Income Distribution	Less than 30,000	0	0	100	50
	30,000-50,000	120	60	70	35
	50,000 and above	80	40	30	15
	TOTAL	200	100	200	100
Land Holdings (In Decimals)	0.00-0.02	0	0	155	77.5
	0.02-0.04	34	17	45	22.5
	0.04 and above	166	83	0	0
TOTAL		200	100	200	100
Drinking Water Facility	Tap water	111	55.5	150	75
	Tube wells	67	33.5	40	20
	Bore wells	22	11	10	5
	Others	0	0	0	0
TOTAL		200	100	200	100

Source- Compiled from Primary data

With respect to Income Distribution, out of 200 respondents from SHG Badi workers, 120 badi workers earn between the range of Rs.30,000-50,000 and 80 badi workers earn between the range of Rs.50,000 and above whereas out of 200 respondents from Non-SHG Badi workers, 100 badi workers earn between the range of less than 30,000. So, it clearly shows that the badi workers who belong to SHG are earning better income than Non-SHG badi workers. In land holdings (in decimals), out of 200 respondents from SHG Badi workers 166 badi workers have 0.04 and above land holdings whereas out of 200 respondents from Non-SHG Badi workers have 155 Badi workers have 0.00-0.02 of land holdings. With respect to drinking water facility, out of 200 respondents from SHG Badi workers, 111 have tap water drinking facility whereas out of 200 respondents from Non-SHG Badi workers, 150 have tap water drinking water facility.

**Comparison of Cost, Price, Profit and Experience Of SHG And Non SHG Women Badi Workers**

The cost, sale price and profit of badi making in study area vary among from SHG and Non-SHG women workers. The

table-3 presents area-wise comparison of SHG and Non-SHG badi workers in Keonjhar district of Odisha.

**Table 3** Comparison of Cost, Sale price and Profit of SHG and Non SHG Women Badi Workers

Particulars	Range	SHG badi workers		NON SHG badi workers	
		Total	Percentage	Total	Percentage
Price per kg of Badi (Rs)	100-150	160	80	75	37.5
	150-200	40	20	125	62.5
	200 and above	0	0	0	0
TOTAL		200	100	200	100
Selling Price per kg (Rs)	150-230	175	87.5	90	45
	230-310	25	12.5	110	55
	310 and above	0	0	0	0
TOTAL		200	100	200	100
Quantity (Kg) sold per day	0-5	0	0	120	60
	5-10	160	80	60	30
	10 and above	40	20	20	10
TOTAL		200	100	200	100
Profit Earn per kg (Rs)	0-100	152	76	150	75
	100-200	48	24	50	25
	200-300	0	0	0	0
TOTAL		200	100	200	100
Profit Earn per Day (Rs)	0-500	92	46	145	72.5
	500-1000	108	54	55	27.5
	1000-1500	0	0	0	0
TOTAL		200	100	200	100
Profit Earn per Months (Rs)	10000-20000	137	68.5	180	90
	20000-30000	53	26.5	20	10
	30000 and above	0	0	0	0
TOTAL		200	100	200	100

Source- Compiled from Primary data

With respect to comparative study of economic analysis of women badi workers in Table-5.8, out of 200 respondents, 160 respondents fix their price per kg of badi (Rs) is in between 100-150 in SHG whereas out of 200 respondents, 125 respondents fix their price per kg of badi (Rs) is in between 150-200 in case of Non-SHG. So, it clearly shows that SHG Badi workers after purchasing black gram from market fix within a nominal price per kg of badi whereas the Non-SHG Badi workers fix their price per kg of badi in a larger extent as Non-SHG don't follow the standard market price rule as in the case of SHG. Likewise, when it comes to selling price per kg (Rs) with respect to SHG out of 200 respondents, 175 respondents sell their badi in a range of Rs.150-230 whereas in case of Non-SHG out of 200 respondents, 110 respondents sell their badi in a range of Rs.230-310. It shows that SHG follows basic market price as per SHG rule in defining market price of a product in the market whereas Non-SHG don't follow the basic market price like SHG and do monopoly in selling badi in the market.

When it comes to quantity (kg) sold per day category with respect to SHG badi workers out of 200 respondents, 160 respondents sell 5-10 kg of badi per day whereas in case of Non-SHG badi workers out of 200 respondents, 120 respondents sell 0-5 kg of badi per day. As it is fact from the above figures that since SHG follow basic market price rule as per SHG they sell their badi in the market with the help of ORMAS in marketing of badi and also sell justified quantity of badi per day whereas in case of Non-SHG badi workers as they don't follow basic rule of price fixation of badi and sell badi in the market in a monopoly way for which they can't sell more quantity sold per day as price fixation varies from badi workers to workers and also of the monopoly in their business only few buyers buy badi from them. In the profit earn per kg (Rs) category with respect to SHG Badi workers out of 200 respondents, 152 respondents earn profit per kg in the range between Rs. 0-100 whereas in case of Non-SHG Badi workers out of 200 respondents, 150 respondents earn profit per kg in the range between Rs. 0-100. In the profit earn per day (Rs)

category with respect to SHG Badi workers out of 200 respondents, 108 respondents earn profit per day in the range of Rs. 500-1000 whereas with respect to Non-SHG Badi workers out of 200 respondents, 145 respondents earn profit per day in the range of Rs.0-500. In the profit earn per months (Rs) category with respect to SHG Badi workers out of 200 respondents, 137 respondents earn profit per month in the range of 10,000-20,000 and 53 respondents earn in between Rs.20,000-30,000 per month whereas with respect to Non-SHG Badi workers out of 200 respondents, 180 respondents earn profit per month in the range of 10,000-20,000 and rest 20 respondents earn profit per month in the range of Rs.20,000-30,000. The hours spent per day for badi making, marketing, loan of SHG and Non-SHG women Badi workers are given in table-4.

**Table 4** Comparison of hours, type, Marketing and Loan of SHG and Non SHG Women Badi Workers

Particulars	Range	SHG badi workers		NON SHG badi workers	
		Total	Percentage	Total	Percentage
Hours Spend per day in Badi making	3-5	0	0	100	50
	5-7	200	100	100	50
	7 and above	0	0	0	0
TOTAL		200	100	200	100
Type of Buyers	Local people	200	100	200	100
	Tourists	0	0	0	0
TOTAL		200	100	200	100
Distance (km) from home to selling point	0-1	200	100	100	50
	1-2	0	0	100	50
	2 and above	0	0	0	0
TOTAL		200	100	200	100
Marketing of the Badi	Local Market Through Intermediaries	0	0	0	0
	Through Cooperation	40	20	0	0
TOTAL		200	100	200	100
Loan Taken	Bank Federation	160	80	50	25
	Money Lender	40	20	0	0
TOTAL		200	100	200	100
Loan Repayment	Bank Federation	160	80	50	25
	Money Lender	40	20	0	0
TOTAL		200	100	200	100
Number of years in badi making	1-5	0	0	0	0
	5-10	0	0	100	50
	10 and above	200	100	100	50
TOTAL		200	100	200	100

Source- Computed from primary data

In the Hours spend per day in badi making category with respect to SHG Badi workers out of 200 respondents, all the 200 respondents spend 5-7 hours per day in badi making whereas in case of Non-SHG Badi workers out of 200 respondents, 100 respondents spend 3-5 hours per day in badi making and rest 100 respondents spend 5-7 hours per day in badi making. In the Distance (km) from home to selling point category with respect to SHG Badi workers out of 200 respondents, all the 200 respondents sell their badi with a

distance of 0-1 km from their home to selling point as SHG Badi workers sell their badi through ORMAS as well as different trade fairs and in the market through the intervention of SHG marketing whereas when it comes to Non-SHG Badi workers out of 200 respondents, 100 respondents sell their badi with a distance of 0-1 km and rest 100 respondents sell their badi with a distance of 1-2 kms. Here in Non-SHG segment, the badi workers sell either at their home or sell nearest to the grocery shops where they sell their badi directly to the shopkeeper.

When it comes to marketing of the badi category with respect to SHG badi workers out of 200 respondents, 160 respondents market their badi in the local market through ORMAS as well as SHG linked shops, trade fairs and federation linked SHG and rest 40 market their badi through cooperation as there is a federation linked with a SHG where they market the badi in the local market with a brand Kendujhari phula badi. In Non-SHG segment, out of 200 respondents, all the 200 respondents market their badi in the local market. From the above table, it shows that with respect to SHG segment, out of 200 respondents, 160 respondents took loan from bank and rest 40 respondents took loan from federation for carrying out their badi making business whereas in case of Non-SHG segment, out of 200 respondents, 150 respondents took loan from local money lender and rest 50 respondents took loan from bank to carry out the badi making business. Similarly, it shows from the above table that in case of SHG, out of 200 respondents, 160 respondents repay their loan to bank and rest 40 respondents repay their loan to the federation whereas in case of Non-SHG, out of 200 respondents, 150 respondents repay their loan to the money lender and rest 50 respondents repay their loan to the bank. Likewise, from the above table, it also shows that in case of SHG, out of 200 respondents, all the 200 respondents have 10 years and above of badi making experience which shows they are well experienced in this badi making activity and when it comes to Non-SHG, out of 200 respondents, 100 respondents have 5-10 years of experience in badi making and rest 100 respondents have 10 years and above of badi making experience which shows that both in case of SHG as well as Non-SHG, the badi workers are well experienced in badi making activity.

**T Test results for comparison of Cost, Sale Price and Profit**

Since the objective of chapter is to compare the economic performance of SHG and Non SHG Badi workers, t- test is used to investigate the difference in cost, sale price of badi, quantity, experience in badi making and profit. Table-5 presents the t-test result of cost of Badi between SHG and Non SHG Badi workers.

**Table 5** T-test Result of comparison of cost of Badi between SHG and Non SHG Badi workers

	Cost of Badi Non SHG	Cost of Badi SHG
Mean	145.80	128.33
Variance	170.91	63.64
Observations	200.00	200.00
t Stat	16.13	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Source- Computed by Author using EXCEL

The result of t-test shows that there exists significant difference at 1 per cent level between cost of Badi between SHG and Non SHG Badi workers. The SHG women Badi workers purchased the badi making ingredients and raw materials in a group and ORMAS for which the average cost of Badi making of SHG workers is Rs. 128.33 whereas it is Rs.145.80 for Non SHG workers. Table-6 presents the t-test result of sale price of Badi between SHG and Non SHG Badi workers.

**Table 6** T-test Result of comparison of sale price of Badi between SHG and Non SHG Badi workers

	Sale Price of Badi Non SHG	Sale Price of Badi SHG
Mean	210.03	214.33
Variance	372.94	1466.14
Observations	200.00	200.00
t Stat	-1.42	
P(T<=t) one-tail	0.08	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.16	
t Critical two-tail	1.97	

Source- Computed by Author using EXCEL

The result of t-test shows that though there exists the difference in average sale price of Badi between SHG and Non-SHG Badi workers, it is not statistically significant. The average sale price of Badi for SHG workers is Rs. 214.33 whereas it is Rs.210.03 for Non SHG workers. Table-7 presents the t-test result of profit per kg of Badi between SHG and Non SHG Badi workers.

**Table 7** T-test Result of comparison of Profit per kg of Badi between SHG and Non SHG Badi workers

	Profit of Badi Non SHG	Profit of Badi SHG
Mean	64.23	86.01
Variance	544.19	1406.51
Observations	200.00	200.00
t Stat	-6.97	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Source- Computed by Author using EXCEL

The result of t-test shows that there exists significant difference at 1 per cent level between profit per kg of Badi between SHG and Non SHG Badi workers. The SHG women Badi workers sale the badi in district level fairs organized by government, local traders and wholesalers in a group and through ORMAS for which the average profit per kg of Badi of SHG workers is Rs. 86.01 whereas it is Rs.64.23 for Non SHG workers. The ORMAS is especially by the Government of Odisha to help the rural producers and members of SHG for marketing of their products. Table-8 presents the t-test result of Experience in making Badi between SHG and Non SHG Badi workers.

**Table 8** T-test Result of comparison of Experience in making Badi between SHG and Non SHG Badi workers

Statistical Measures	Experience of Badi Making Non SHG	Experience of Badi Making SHG
Mean	12.81	16.35
Variance	24.72	11.07
Observations	200.00	200.00
t Stat	-8.38	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	

t Critical two-tail 1.97  
 Source- Computed by Author using EXCEL  
 The experience of Badi making is reflected by the number of years of engagement of women in this activity. The average experience of SHG Badi workers is 16.35 years but it is 12.81 years in case of Non SHG workers. The result of t-test shows that there exists significant difference at 1 per cent level between experience of Badi making between SHG and Non SHG Badi workers. Due to higher years of experience and expertise, the SHG Badi workers earn more profit per kg than their counterparts.

**Table 9** T-test Result of comparison of Quantity of Badi between SHG and Non SHG Badi workers

	Quantity of Badi per Day Non SHG	Quantity of Badi per Day SHG
Mean	6.64	8.02
Variance	5.74	4.84
Observations	200.00	200.00
t Stat	-5.98	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

Source- Computed by Author using EXCEL

t-test result of quantity of badi produced per day by SHG and Non SHG Badi workers. The average quantity of badi per day made by SHG Badi workers is 8.02 kg whereas it is only 6.64 kg for Non SHG Badi workers. Since SHG workers are provided training through ORMAS, they are more skilled in badi making which helps in producing higher quantity of Badi per day.

**CONCLUSION**

SHG Badi workers have better marketing facility than Non-SHG badi workers. ORMAS attached with SHG Badi workers to facilitate the marketing facility which Non-SHG badi workers don't have. Due to ORMAS, SHG Women badi workers sell their badi in nearby shops, grocery shops, hotels, stall and fairs inside and outside the district whereas the Non-SHG badi workers sell badi in their home only. Owing to this, it can be said that marketing and market orientation is a trait which is associated with market related implementation to manage their business SHG Women Badi workers had medium to high level of market orientation as the SHG Badi workers had taken up entrepreneurial activities, while in case of Non-SHG Badi workers they are not involved in entrepreneurial activities and thus low level of market orientation. Risk orientation is also seen in the comparative analysis study between SHG and Non-SHG Badi workers. SHG Women Badi workers have got the courage to face risk in their badi making business as they rarely face loss in the business as proper marketing facilities by SHG marketing facility as well as by ORMAS whereas Non-SHG Women Badi workers have equal chance of facing profit and loss in their business as they are not attached in any type of marketing facility by ORMAS. Innovativeness is yet another tool which influences socio-economic change in one's life and their empowerment too. The SHG Women Badi workers adopt some innovative ideas and practices as they get training and linked to other awareness campaign program organized by Government and other agencies from time to time but in case of Non-SHG Women Badi workers they lack in innovativeness as they are not trained and not participated in any awareness campaign program organized by the Government. In case of financing to

the badi workers, SHG Women Badi workers get finance from Bank as well from the federation whereas the Non-SHG Women Badi workers get finance from money lender little finance is provided by few banks. So, going through all the facts, it can be said that the SHG Women Badi workers are organized and have more structured machinery in the badi making business whereas the Non-SHG Women Badi workers are unorganized and do not have structured machinery in the badi making business. So in a nutshell, with all the favourable conditions applied to the SHG Women Badi workers, the Non-SHG Badi workers are not interested in going to the SHG as they are not getting the favourable conditions and that's why some Non-SHG Women Badi workers are working independently in the Non-SHG zone and earning income by selling the badi from their home only to sustain their livelihood.

To conclude, there exists significant variation in cost, sale price and profit in Phula Badi among the badi workers and study areas. Since badi is prepared using different grinding machine and different types of ingredients, the variation in economic variables is obvious. The profit per kg and per day in badi making is significant and more for SHG badi workers than Non SHG badi workers. The institutional supports and loans provided to SHG badi workers for which profit is higher than Non SHG workers. So, it is concluded that, to earn higher profit, the women in Keonjhar district should join in SHGs.

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