

“One Panchayat, One Product” A Strategy for Sustainable Rural Economy

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Abstract— The OVOP Movement started in 1979 at Oita prefecture of Japan became one of the successful regional economic programmes across the globe. This is mostly based on transforming indigenous local products in to a global competitive product for improving the welfare of rural people, village economic dynamism, local income, and social solidarity. The extensive OVOP has a capacity to become a Geographical Indicator (G.I). It is a fundamental research mainly concern with generalization of public perception towards the OPOP program in India. The target population of this study was the farmers from rural area. A total of 100 positive responses were collected from different villages of a Panchayat. A simple random sampling procedure was adopted to collect the information from the farmers. The questionnaire was of dichotomous type, where the respondents has to answer in either Yes or No. The Primary data was collected by the researcher and his students in rural villages. Data were collected on demographic characteristics by an interview schedule. Randomly the farmers were visited and interviewed personally. The Secondary data and other relevant information were collected from journals, publications, annual reports, books and online sources. Data collected were processed using SPSS and Statistical packages. Descriptive statistics, Chi-square Test, t – test were employed to analyze the data.

Index Terms— OVOP, OPOP, SPSS, Descriptive statistics, Chi-square Test,

I. INTRODUCTION

1.1 OVOP, AN INDIAN PROSPECTIVE:

India ranked 130 among 188 UN member countries (total of 193 countries) in 2014 in Human Development Report 2015 released by the United Nations Development Programme (UNDP). India's HDI value for 2014 is 0.609, which puts the country in the medium human development category. Indian farmers are mostly self sufficient for a subsistence farming, but when we speak about the economic status in general it is poor. The major reasons may be that they lack the knowledge, interest, capital or technology to explore their productivity and productions.

When we speak of agriculture, either they face the pre harvest problems or the post harvest problems. The pre harvest problems are seeds (price, quantity or availability), fertilizer, capital, irrigation or rain, technology, pest control, machines and equipment etc. Then post harvesting problems are food

loss, food wastage, storage, damage, selling, marketing, transport etc.

The country is now in a near constant state of food shortage with persistent high levels of nutritional deprivation in different parts of India. Our different food security schemes are not a long term and permanent solution to the economic development challenges of the farmers. the effects of slow agricultural economic growth and macroeconomic problems on livelihoods and food security are directly linked to poverty. In India about 60% of the population is dependent on agriculture or its allied services. It is contributing only 14% of the country's GDP with growth rate of only 4% which is one of the worst performing sectors. Most part of Indian agricultural system is highly dependent on Monsoon (rain-fed) followed river drain (river-fed) system.

Location of Oita Prefecture



1.2 HISTORICAL BACK GROUND OF ONE VILLAGE ONE PRODUCT (OVOP)

The strategy of OVOP in Oita Prefecture (Prefectures are the administrative divisions in Japan, there are total 47 such Prefectures and Oita is one of those) advocated by then governor Morihiko Hiramastu in 1979 and implementation started in 1980. Long before it the Japanese Government to save and revive the rural towns and villages, adopted many central strategies to attract industries in those rural areas. Despite of many attempts, the result was insignificant, because the government did not took the considerations of rural communities and also without involving people. Because each community has its own peculiar features and they react as per their features, government was unable to find those unique features. In 1961 a village called Oyama, a topographically hilly area in Oita Prefecture was going through acute poverty, hence the people of the village decided to make their own rural development policy irrespective of whatever then government policy. As per the government, the

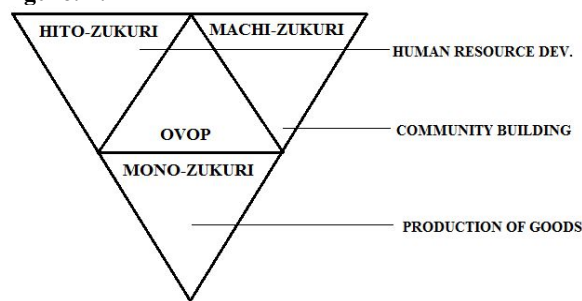
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assistance was for cultivation of rice but topographically it was more suitable for higher value-added products using local natural resources. Mr. Yahata, the then Head of the Oyama agricultural cooperative has introduced three main ‘whole-community’ development initiatives. First focused on increasing incomes by farming a commercial crop alternate to rice and reducing the workload of farmers the New Plum and Chestnut (NPC) movement was started in 1961 with a slogan of “Let’s go to Hawaii by planting plums and chestnuts”. After the success of first New Plum and Chestnut (NPC) movement, it was followed by the second NPC (Neo Personality Combination) movement, started in 1965, for community learning for exchange and enhancement of knowledge for productivity. And finally in 1969 the third NPC (New Paradise Community) movement was launched to improve the quality of life by establishing a cultural center and a market in each district. As a result the farmers at present are well equipped with production to marketing skills and having a greater sustainability and a higher quality of life. Mr. Morihiko Hiramastu became the governor of Oita prefecture in 1979; with the past experiences from Oyama’s development strategies, in the same year he initiated a movement called “Isson Ippin Undou” in Japanese, which is One Village One Product (OVOP) movement, as an idea for regional economic revitalization in his prefecture. The strategy of one village one product presented a strong impression that, the movement is for increase in production of goods (“mono zukuri”). But it has not overlooked the other aspects of life, these are human resources development (“hito zukuri”) and community building (“machi-zukuri”). Hence OVOP movement involves two basic structures of sustainable production i.e. human resource development and community building.

The structure of pyramid is inverted as the production of goods is a single objective, while there are two major objectives i.e. human resource and community building in making a OVOP strategy by a village or a community. This is presented below in figure 1.

Figure: 1.



INVERTED PYRAMID OF OVOP IN JAPAN

Source: author

1.3 SIMILAR INITIATIVES ACROSS THE GLOBE:

The concept of One-Village One-Product movement, originated in Oita prefecture, has been adopted by many developing and under developed countries across the globe under different names.

The following are the similar initiatives for One Village One Product or One Town One Product are in operation under the supervision of central government of a country.

- One Town, One Product (OTOP), Taiwan, Republic of China, (ROC), 1989.

- One Tambon, One Product (OTOP), Thailand, 2001.
 - One Village, One Product (OVOP), Malawi, 2003.
 - One Town, One Product (OTOP), Philippines, 2004
 - One Village One Product (OVOP), Nepal, 2006.
 - One Village One Product (OVOP), Kyrgyz Republic, 2006.
 - AHAN-Aik Hunar Aik Nagar in Urdu (OVOP), Pakistan, 2006.
 - One Village One Product (OVOP), Mongolia, 2006.
 - One Village One Product (OVOP), Cambodia, 2006.
 - One Village One Product (OVOP), sub-Saharan countries.
- As per the size of the population and geographical area, it has been named differently by different countries. But the core concept of go global, self reliance and human resource development are always at centre of the program.

1.4. THREE PILLARS OF OVOP:

The OVOP movement is community based holistic approach for a sustainable development, which focuses on three basic principles i.e.

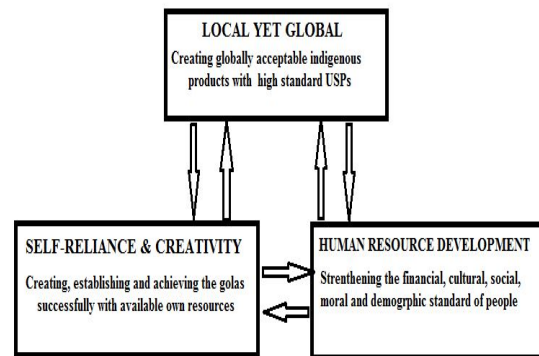
First: self-reliance and self-help, creativity.

Second: human resources development.

Third: local yet global.

These are initiated by Oita Prefecture and followed by many other countries across the globe. The basic principle of OVOP movement is that local people take the lead in OVOP movement independently on their own with self-reliant spirit, and shall be supported by central government or outside donors for capacity building. The whole concept focus on indigenous production of innovative and unique products with high standard USPs (Unique Selling Points) using the local resources. Hence it could give it a GI (geographical Indicator) status of its products placed at global platform successfully. The basic concept can be depicted in a diagram representing the three inter-related concepts for a successful OVOP strategy. This is presented below in the

Figure: 2.



THREE PILLARS OF OVOP

Source: Author

1.5. PROBLEM STATEMENT:

One Village One Product (OVOP) program was never implemented officially at central level, though it had been advocated by Dr. A.P.J. Abdul Kalam, the Ex President of India.

The diversities in the skills, capital and resources in rural India was always at its peak, hence the production of goods

and services is also very high. Moreover the Government India strategies for the employability skill development programmes are haphazard. Speaking about a average rural Indian, everybody knows everything, but nobody is master in none. A village of hundred people produces hundred different types of products and the quantity is of subsidence type, if any one produces more it may be wastage or a loss of food. Even though people are willing to do something, it is direction less and the government is incapable of giving a proper direction to them. It is just like pulling a cart from all the directions, where the labor and efforts are done but the cart is stick to its position.

This study, therefore, intended to assess the people attitude for a community based single product production in a Panchayat, i.e. One Panchayat One Product concept. Hence the researcher could come to a conclusion regarding it's the people or the government is responsible for the scattered rural economy.

1.6. OBJECTIVES OF THE STUDY:

The general objective of this study is to assess the scope for One Panchayat, One Product (OVOP) program in rural India. Specific Objective is:

1. To investigate the scope for OPOP in India based on gender.

1.7. HYPOTHESES:

1. Gender is not a factor to accept or reject OVOP program.

1.8. JUSTIFICATION OF THE STUDY:

India is an agrarian dominated country; the poorest section belongs to this section of population. We have the second largest agricultural land in world after USA, still we lags behind in terms of export of agricultural products, most of the crops are either lost in food loss or food wastage. There are huge fluctuations in the prices of the crops in a single year. Farmers are not getting right price for their investments, marketing or processing industries are not approaching the sites of agriculture or production. Out of many reasons, the variability of crops and an insufficient quantity does not give a return for industries to put their factory in those areas is major one.

Hence the study tries to analyze how for the people ready to accept the policy of (one Panchayat, One Product) OPOP, which can bring industries to their localities.

1.9. SCOPE AND LIMITATION OF THE STUDY:

This study will allow us to understand the psychology of Indian farmers regarding community base agricultural system. This will enable us to understand how people based on gender, qualification, age and marital status perceives OPOP. This study is confined to getting information from the farmers or rural India only.

It did not take the consent of industries, at what quantity they can move to the farmers.

This study is also mostly confined to agriculture and its allied services.

The information gathered are from a sample of 100 responses in a dichotomous questions from a small geographical area.

II. GIST OF LITERATURE REVIEW:

The gist of above literature is that, OVOP in the present form or in its past whether in nomenclature of OPOP, OVOP, OTOP, the main concern is to uplift the standard of life of the needs. A systematic and holistic approach of community development program is essential for achieving the set targets. Think globally, act locally is the main motto to present the indigenous products in global market. Irrespective of government or private investment assistances the goals can be achieved if the community as a whole takes the necessary steps.

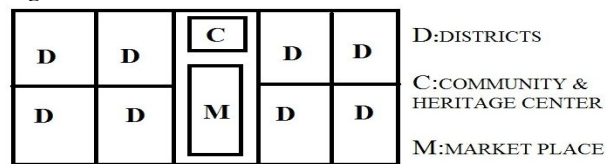
2.1. THEORETICAL FRAMEWORK OF JAPAN'S OVOP STRATEGY:

Theoretically the secret behind the success of OVOP in Japan was proper arrangement of its different components. The geographical location was analyzed critically and accordingly the nature and type of product was decided. People are well equipped with technical as well as the marketing knowledge. They could directly access to their customers and purchasers. They directly interact with their buyers regarding the quality and cost, accordingly they modify and reproduce as per the need. Directly handle the problems from the buyers, which enables them for new product development and value addition to the existing ones.

2.2. STRUCTURAL FRAMEWORK OF JAPAN'S OVOP STRATEGY:

The below figure 3 represents a basic model of OVOP in Japan, where the Oita Prefecture (one of the 47 prefectures) consists of many Sub-Prefectures. These Sub-Prefectures are divided in to eight districts surrounding a central place, where the market along with the community & heritage center is established. The market place is for trading activities between the sellers from villages and the buyers from outsiders took place, while in cultural and heritage center the village people do regular meetings, interactions, celebrations and exchange ideas for future course of actions.

Figure: 3.



BASIC STRUCTURE OF OVOP

Source: Author.

III. RESEARCH METHODOLOGY

3.1 STUDY AREA:

This study was conducted in Ganjam district which is located at the approximate latitude of 19°22'59"N 85°03'00"E. Ganjam is a district in the state of Odisha belongs to country India in south Asia. It is the most populous district in the state of Odisha with population around 35 lakhs and population density of 429 inhabitants per Km². Topographically it is a 60 Km cost line along the Bay of Bengal in Indian Ocean, on eastern side. Hills and table lands are in the western side of the district. The average temperature is 26.8⁰centigrate which is equitable thought the year. The average rain fall is 1194 mm per year and 90% of the rain is during the monsoon from June

to August every year. The district has alluvial soil in its eastern part (coastal region) and laetrile Soil in the west (hilly table land) with small patches of black cotton soil at the centre and in the north east close to Chilka Lake (brackish water lake). The forest of Ganjam district comes under the mix moist peninsular high and low level Sal forests, tropical moist and dry deciduous and tropical deciduous forest types.

3.2 SAMPLING DESIGN:

The target population of this study was the farmers from rural area. A total of 100 positive responses were collected from different villages of a Panchayat. A simple random sampling procedure was adopted to collect the information from the farmers. The questionnaire was of dichotomous type, where the respondents has to answer in either Yes or No.

3.3 DATA COLLECTION:

The Primary data was collected by the researcher and his students in rural villages. Data were collected on demographic characteristics (gender) by an interview schedule. Randomly the farmers were visited and interviewed personally. The Secondary data and other relevant information was collected from journals, publications, annual reports, books and online sources..

3.4 DATA ANALYSIS:

Data collected were processed using SPSS and Statistical packages. Descriptive statistics, Chi-square Test, t – test were employed to analyze the data.

IV. FINDINGS, SUGGESTIONS AND SCOPE FOR FURTHER RESEARCH

4.1 INTRODUCTION:

This chapter outlines the findings from the research which was done to assess the scope of OVOP strategy in India. To analyze how much an Indian farmer demographically ready for this strategy. To evaluate the future of OPOP in India the following sub-topics are discusses in detail. These are gender, qualification and age towards the OPOP strategy in India.

4.2. GENDER RESPONSES:

There are total 100 valid responses, out of which 55 are male and 45 are females. Among male there are 27 are in support of OPOP while 28 are not in support of it. Among the female 34 are in support of OPOP while 11 are not in the support of it. The *Null hypothesis* (H_0) says that there is no gender base difference in opinions for OPOP

The alternate hypothesis (H_a) says that there is a significant difference in opinions based on gender.

The contingency table below provides the following information:

Table 1.1 is the observed cell totals,

Table 1.2 is the expected cell totals

Table 1.3 is the chi-square statistic for each cell.

The chi-square statistic, *p*-value and statement of significance are calculated by using computerized statistical tools.

Table: 1.1.

OBSERVED FREQUENCIES:

	Male	Female	Marginal Row Totals
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YES	27	34	61
NO	28	11	39
Marginal Column Totals	55	45	100 (Grand Total)

Source: primary data.

Table: 1.2.

EXPECTED FREQUENCIES:

	Male	Female	Marginal Row Totals
YES	33.55	27.45	61
NO	21.45	17.55	39
Marginal Column Totals	55	45	100 (Grand Total)

Source: summarized from computer output.

Table: 1.3.

CHI-SQUARE VALUES

	Male	Female	Marginal Row Totals
YES	1.28	1.56	2.48
NO	2	2.44	4.44
Marginal Column Totals	55	45	7.28 (Grand Total)

Source: summarized from computer output

The calculated chi-square statistic is 7.2864. The *p*-value is .006948; hence this result is significant at $p < .05$. Also the Critical value of chi square (χ^2) at level of significance 5 %, with degree of freedom one (1) is 3.841 which is less than (<) the calculated value 7.2864; hence this result is significant.

Result: we will reject the Null hypothesis (H_0) which says that there is no significant difference between male and female responses for OPOP strategy, and the alternate hypothesis H_a which says there a significant difference between the responses of male and female farmers for OPOP.

The above analysis show that, out of 100 valid responses 61 responses are in favor of OPOP and 39 are not in favor, in percentile 61 % of the rural population feel that OPOP shall be a good option for uplift their economic status. Out of this positive responses majority of the female (34) 75.5 % of the female population favored OPOP, while only 49% of male are in support of it and rest 51% male don't fell it could help them.

4.4 IMPLICATIONS OF RESULTS:

When we know that the majority of the population is in favor of OPOP we can bring it in operation. The concern is that a majority of male population are not in support of it, there may be several reasons including they don't want to disturb the present production system and not sure about the future productivity of OPOP strategy. While majority of female population are in support, the reason could be they want to avail new opportunities and their believe in social bondage and community concepts.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY:

This study was done to analyze the scope of OPOP program in rural India. How the population as whole responds to the said strategy, along with its gender as a part of micro-analysis.

As Panchayat is the basic administrative unit of a Panchayat raj system, the villages under a Panchayat are the target areas for sample collection. The perception of the rural population shall be analyzed before the OPOP program is implemented. Primary data was collected by direct interview having dichotomous questions. This was further analyzed by using descriptive statistics, chi – squares, and other arithmetic statistical tools.

The analysis revealed that there is a significant difference among the male and female rural population OPOP program. The responses of female are more encouraging than the male farmers.

5.2 CONCLUSION:

The following conclusions can be drawn from the above study.

First, the study has found out that major parts of the population are in favor of OPOP strategy. The people feel that to uplift the standard of living the community based business model is more preferable than an independent business model.

Secondly, the female farmers in the society are more interested in community based business system as compared to the male farmers.

5.3 RECOMMENDATIONS:

Hence to make OPOP a successful project in India the following suggestions are recommended by the researcher.

- Majority of the population seek an OPOP a-like program to improve their financial status, hence it is possible to introduce this program in rural India.
- In initial phase of introduction of OPOP program, the selection of product shall be made keeping in mind that the female farmers are more interested than the male farmers.
- Successes of the initial projects are highly essential as these would motivate the people for next upcoming programs.
- To make the program successful, the assistance from the external bodies like local or central government or private investors are highly essential but interference shall be avoided.
- Selection of product shall be made as per the indigenous nature of product, skills available in local, availability of manpower and sustainability of project.
- OPOP program should target the population as whole in a village, not like only the most vulnerable groups are given preferences. I.e. no discrimination on the ground of vulnerable and non vulnerable.
- Farmers under OPOP shall be given technical, financial and marketing assistance to open, run and promote business.
- Under OPOP program the farmers shall be updated with new value addition trends and techniques for better price for their products.

- Proper infrastructure for storage, transport and processing shall be availed for perishable goods.
- Government Policy to attract manufacturing, distribution and marketing industries in Panchayat shall be channelized.

SCOPE FOR FURTHER RESEARCH:

The present paper throws light on the gender as the demographic trait of the rural population; hence there is a scope to analyze the people on other traits like age, qualification, economic status, profession.

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