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Sustainable Village Development Plan with People's Participation: A Case Study of a Multi-ethnic Village of Jharkhand

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Abstract:

The new approach to village planning provides a paradigm shift in the traditional approach where the role of the government is changed from that of governance to facilitation. It envisages a bottom-up approach whereby the users' group themselves decide their work programme. It is a well-known fact that village development is a continuous, pluralistic and widely participatory process and basically means, advancement of an area, revealing, unfolding or opening up something which is latent and a change that is desirable. It requires a comprehensive and sustainable plan of action for the development of rural area or areas which are lagging behind in socio economic development due generally to prevalence of very low level of literacy and education and heavy dependence on primary production, viz. Agriculture, animal husbandry, fishery etc. and where the distribution of productive assets, such as land, is highly skewed (giving rise to serious disparities in income levels), social and development of social and physical infrastructure is lagging behind. In the above backdrop, a participatory exercise was carried out in the Jaspur village under Angara block of Ranchi district with the help of schedules and interview among the villagers to observe the present status and make a sustainable planning. Several Non-Governmental Organizations and Government Organization have been working the village earlier. This study has been an endeavour to find out the resource as well as drawbacks of the previous development attempts. The planning was needed for the holistic development in sustainable way to change into a model village. Emphasis was put on livelihood security, conservation on natural resources, environmental protection, infrastructure development, improvement on practical education, awareness on health and sanitation as well as with the interest of government and the people's participation on planning to make a Sustainable Model Village.

Keywords: People's Participation, Village Development Planning, Sustainable Development

1. Introduction

Model development plan for a village is essentially a plan of action for the development of rural area or areas which are lagging behind in socio economic development due generally to prevalence of very low level of literacy and education and heavy dependence on primary production, viz. Agriculture, animal husbandry, fishery etc. and where the distribution of productive assets, such as land, is highly skewed (giving rise to serious disparities in income levels), social and development of social and physical infrastructure is lagging behind. No enduring result can be achieved in promoting the development of an area, or any section of the population living therein, without giving due attention to the development of human resources and the production potential of the area and build-up of basic physical and social infrastructure required. A holistic approach in this direction necessitates giving high priority for bringing about improvement in the socio-economic condition of the weaker sections of the population. Great thinkers of model village like Tagore and Gandhiji always had given importance to self-reliance and integration of village resources. They knew that the read ideal village is not possible to be existed, but a complete and continuous effort to make it a model one does really inspire other villages. Thill (2011) conducted a study on model village and its sustainable natural resource management, village self-governance, modern policies, participatory development, migration, social equity, abundance and true democracy of Ralegan Siddhi, located in the drylands of Maharashtra. Anna Hazare, the renowned social activist has been the main leader behind the village. Srinivasa et al (1993) and Dhadave (1996) conducted several case studies which found that despite of a lot of diversities, a unity in core was existing in every village and community. Different segments in rural and urban societies has been running in a thread of social transformation in existing societies. A study conducted by Paranjape et al. (1984) on ShramikSanghatana (Labour Association) in the Shahade region of the Dhule district, brought to light the fact that the tribal young women were so shy to come out of themselves that eliciting

participation from them was a major obstacle in achieving self-reliance. Some studies by different scholars like Ambedkar (1994) and Galab (1993) on rural development activities by government organizations emphasized on the process of motivating, organizing and strengthening the grassroots level machineries. Some studies have also been done on the comparative analysis of government and nongovernment organizations (Sangita, 1990; Pant, 1994; Shah, 1981). Over the years it has been found that the impact on the various developmental issues have been generally not due to one or two schemes in particular but has been due to a combination of interventions from number of schemes / programmes. Thus evaluation taken up of these schemes has been fragmented, i.e. each scheme is evaluated separately, and that makes it very difficult to get an overall & compact picture of the development-taking place. It renders assessment of a specific scheme's impact rather difficult. It is because of the fact that most of these schemes are interlinked, complementing and supplementing each other. Thus it was found very difficult to attribute to a particular scheme / programme the reasons of success or failure in the developmental process. Hence, in a workshop organized under the aegis of the Planning Commission in which the leading NGOs and other reputed institutions had also participated a view was taken to adopt an area-based approach for the evaluation of the impact of the various schemes of the Government of India. It is for this reason the present investigation has been carried out to document the Jaspur village of Angara block, Ranchi district, Jharkhand in order to study Socioeconomic condition, population and resource scenario ands to prepare accumulative plans to make a sustainable model village. During the participatory exercise, the researchers realize the readiness of the villagers during the entire course of activity because the 'stick of control' were handed over to them. Finally, a plan has been finalized with a hope that, it would change the livelihood condition of the community because participation fosters ownership of the people over resources and produce better results.

The present study tries to explore all the aspects mentioned above as much as possible from the studied village to give a comprehensive picture for future development. It was found that several NGOs and governmental agencies are working in the village for a long time and their approach is different but the objective is to bring positive change. Considering the present scenario of integrated rural development, it is of immense importance to have a comprehensive baseline information including almost all the aspects of livelihood and lifecycle of the villagers to prepare a plan for village development.

2. Context, Study Area and Method of Study

The villagers experienced a plethora of developmental initiatives since 1989, when Ramakrishna Mission, Divyayan KVK initiated their activities with night school programme. Since then the villagers received several benefits both individually and communally. Apart from Ramakrishna Mission, several other NGOs and government organization extend their support for the upliftment of the villagers. In the year 1997 the villagers of Jaspur first time get the facilities of electricity. This afford was taken by government. In first phase only 24 households are connected with electricity. Later all the families are connected with electricity. For the electricity they pay Rs. 120/household/month. In the year 1999, cemented roads were constructed for better inter village communication under Jawahar Rojgar Yojana (JRY) scheme. This whole work had been completed in 5 days. Again In the year 2004 road was constructed with MLA assistance. In the year 2007, the Jharkhand Tribal Development Society (JTDS) programme was running in this village. Here different types water conserving activities like making bundh at fields, digging of pond etc. are taken at village level. A NGO namely 'Jab Jago Tab Sabera' assisted 16 households for latrine in the year 2006. These were first latrines. Later, another 9 household got this latrine facility from the same organisation. But due to unawareness and previous practices still now the members ofthose families do not practice those latrines. The different activities are conducted by Ramakrishna Mission which includes nightschool, solar electricity, vermicomposting, etc. Night school was run by RamakrishnaMission in the year 1989 which has got 18 beneficiaries. 13 persons have got benefited from the solar electricity package in 1995. Ramakrishna Mission conducted demonstration on vermicompost in the year 1996. And since last six years Ramakrishna Mission has stopped the developmental work in Jaspur because of no participation of the villagers was not seen. The CGSB (Community Gene and Seed Bank) started developmental initiative since 2007 for the more production of local seed. It was run by Gene Campaign. This Campaign has a motto that campaigning in villages, bring back the local seeds. The Campaign provides the seeds like paddy to the villagers for cultivating the local seeds in the field. After harvesting the Campaign bought seeds from the villagers of Jaspur and the Gene Campaign provided to theother villagers. Like that local seeds are increasing day by day in Jaspur village. And the villagers are not facing the problem of local seeds in agricultural

However, the initial information about the block has been gathered from the Block office and secondary sources. Based on the information, a pilot survey has been conducted inthe village to get acquainted with the overall situation and establish rapport with the villagers. Since the main objective of the study was to prepare a comprehensive plan based on the baseline report about the village, the universe of the study includes all the 45 families of the village. However the key informant was selected purposively depending on the age, knowledge about the village and high participation in the village activities. The relevant primary data pertaining to the present study were collected from selected respondent with the help of specially designed pre-tested structured schedules. Data have also been collected by the known social research methods like case study, observation and group interview. The information related to main occupation of male members along with their income and amount of agricultural land owned were considered to determine the household occupation. Secondary data related to this study were collected from related existing literature, websites and block office. The method of analysis was both qualitative and quantitative. The data onfive types of capital were collected and thus used in forming the sustainable plan.

3. Village Profile

There are altogether total 220 numbers of populations out of surveyed communities. The total numbers of male and female population are 125 and 95 respectively. There are 45 households in Jaspur village. The average household size is 4.88 and the overall sex ratio

(number of males per 100 females) is 131.57. Total literacy rate is 68.63%. There are only 3 castes viz. Karmali, Mahato, Singh in the entire Jaspur village. There are 2 incomplete families, 26 Nuclear families, 3 Supplemented Nuclear families and 14 Joint families in Jaspur village. The frequencies of joint families are more in Mahato families than Karmali and Singh families. It was because Mahato families were mostly engaged with agriculture activities, so the need of more labour. That was why they seek more children in the families and they want to live together in a family. The highest proportion of population (40) belongs to the age group 15 to 20 year which constitutes 18%. The most of households (12) having income Rs. 2001 – 3000, these households were engaged with agricultural activities mostly. There were 2 ponds in community basis and were used by 18 household. There were 29 personal wells and 3 community wells were used by 39 households. 41 households use 6 community tube well among themselves. The villagers use well mainly for the irrigation to the fields and drinking, bathing purposes. 24 households have access to television. People of 7 households read newspaper daily. The villagers use newspapers in Hindi language. People of 11 household have got access to radio and 41 households use 52 mobiles. Here more respondents in mass media were in mobile usage and fewer respondents were in newspaper usage.

4. Result and Discussions

Households engage in certain routine strategies (involving various activities) to ensure their livelihood. For instance, they may establish a certain division of labor between the members, let some resources (e.g. land) to other people for a rent; allow part of their labor force to be hired for a wage; send some family member to work at some distant location an send back remittances every month; raise some livestock for family consumption or exchange and so on. Besides these routine activities, a household may have some extraordinary strategies and activities to cope with times of distress. These coping strategies (or coping mechanisms) may include a wide range of variations of their ordinary livelihood, they may send more people to the labor market, liquidate livestock, reduce consumption withdraw children from school and put them to work, and so on. Some of these coping mechanisms are only emergency measures, intended for a very short time, whilst others may be sustained for a longer period. Existing surveys and studies in the area at risk may have identified in advance what are the routine strategies and what are the most usual coping mechanisms of the various types of households existing in the area. Such information belongs in the baseline and will be extremely useful for guidance in planning for livelihood improvement of the community.

The economy of any community may be considered as an adjustment to specific physical and biological condition of certain needs, capacities, aspiration and values. Economic aspect is indeed one of man's growing knowledge of control over the forces external to himself. Economy of community at any time is also necessarily the production of an adjustment between culture and environment. The livelihood of Jaspur village is observed to be enhanced by farming practices like in rabi and kharif season and assisted by animal rearing and forest resource collection. The people of Jaspur have several livelihood strategies and the relative importance of these strategies has changed over the past years in response to changes in local economic landscape. The households having land are basically owner-cultivators most being marginal peasants (34). The small farmers are 6 and lands less farmers are only 5 who belong to Karmali families.

4.1. Issues and Problems in the Village

The data of the present survey also helps in identifying several emerging issues that need to be taken care of before preparing an integrated planning for the village development. The issues and problem are discussed in this section.

In Jaspur village, there is a high inequality status in gender and sex ratio; they seek boy child rather than girl child. There have the caste problem like Karmali families are more reluctant by Mahato and Singh; they thought that Karmali families come under low caste. The married couples do not want to live in joint family and for that old parent become weak in mentally and economically. And this modern tendency leads to destruction of peacefully well traditional joint family. The children are living alone without love of their grandparents in a nuclear family. Most of the villagers do not practice the family planning, so there have rapid growth of birth of child. The women are engaged to do more work than men, source of visible income is very less.

The lack of rain in the early growing season as well as too much rain fall in the middle of the growing season caused sudden rises in water affect rice cultivation. While vegetable production was found to be a profitable income generator due to the high demand for vegetables among villagers looking to supplement their daily diets, villagers seemingly lack motivation for increasing vegetable production. The villagers recently shifted to the cultivation of commercial crops like, groundnut, potato but they suffer from the lack of marketing facilities to get remunerative prices. Again the absence of productive employment sources, the youth seems to migrate to earn from the wage labour. They do not use the modern equipment or machinery. Most of the farmers are not literate and they have no any training on agriculture practices. Further they don't have knowledge on soil-testing.

The level of villagers' participation in most village based activities is also found to have contributed to the underdeveloped condition. The problem of active participation is a problem which occurs through all levels of society from village committee members to ordinary villagers. In the surveyed village, it was reported that a president of village development committee is reluctant to assist or to fully support other development programs in the pretext that he works under voluntary conditions and thus does not want to create extra work for himself. Further undermining development within the target communities is the fact that very poor and/or, uneducated villagers are reluctant and/or unavailable to participate in any development projects.

4.2. Participatory Intervention and Convergence Mechanism for Sustainable Development

The most basic livelihood outcomes relate to satisfaction of elementary human needs. The ultimate outcome is to achieve the preservation of the household and to rear the next generation with a desirable quality of life. People tend to develop the most

appropriate livelihood strategies possible to reach desired outcomes such as food security, good health, "wellbeing" etc. Unstable or unsatisfactory livelihood outcomes may be the result of several factors which often interact including low levels of livelihood assets, high degree of vulnerability to external shocks, and insufficient livelihood support from surrounding institutions (e.g. local government, financial markets). Sustainable Development (SD) implies economic growth together with the protection of environmental quality, each reinforcing the other. Sustainable Development, thus, is maintaining a balance between the human need to improve lifestyles and feeling of well-being one hand, and preserving natural resources and ecosystems, on which we and future generations depend. Livelihood development and income generation become the first preference to be the important aspects of sustainable development. The initiatives through the participatory planning in each every aspects are discussed below;

Sustainable agriculture is compare three broad types of farming: traditional production systems, conventional modern agriculture (such as Green Revolution technologies), and sustainable agriculture. It can compare them across three dimensions: ecological, economic and social. Agricultural practices should be focused on reduced use of off-farm inputs with less harm to environment and consumers. Bio-fertilizers and bio-pesticides are the potential alternatives in Jaspur village. There should be an improved emphasis on conservation of soil, water, energy and biological resources as excessive use of chemical inputs has resulted in degradation of soil ecosystem. Emphasis should be given to adopt such irrigation practices like drip and sprinkler irrigation which reduces the wastage of water. Rainwater harvesting should an important component of better agricultural practices to increase water availability in rabi and zaid season and recharge groundwater sources in Jaspur village. Promotion of water conservation techniques like making of water tank, digging more wells, dova for using in Rabi season crops. Conduct training on livestock management by the panchayet and villagers can take the training on livestock with free of cost from DivyayanKrishiVigyan Kendra (Ramakrishna Mission) in Ranchi. Make a bridge the gap in infrastructure required under Animal Husbandry – new veterinary hospitals, strengthening/Artificial Insemination centers have been proposed to meet the requirement. Improved varieties of goat should be proposed by the block to be given to facilitate breed improvement of local goat population. To meet the feed requirement, feed plants should be proposed by Angara block, for fodder production fodder seed should be distributed to dairy farmers of the village. Vaccination of livestock is important for maintaining healthy animals, the programme should be proposed by the panchayat to cover 100% of the livestock population of the village. Organizing people's organizations such as co-operative societies leads to plethora. The SHG Groups help to overcome such bottle neck of livestock which on sustainable basis to deliver all the backward and forward linkages required for successful running in the village Jaspur. A system for providing veterinary care and Breeding services at the door step of farmers need to be evolved through cooperatives/NGOs. The community land belonging to Panchayat could also be used for the purpose of Suitable grasses and legume mixture can be established along with forest trees. The farmers have to be educated through discussion and demonstrations, on the relative importance of various practices and options that could be exercised in the field of animal nutrition and animal health for maximizing the productivity. The resources available locally would be used for motivation of farmers. Good quality animals preferably of the Black Bengal Breed. Black Bengal crosses with Beetal bucks as studied by Birsa Agriculture University, however, would be the most suitable breed for milk and meat yield for this region. However, care should be taken to purchase male and females from different source to avoid inbreeding. Farmers should be provided with breeding units for regular supply of males and females among the farmers for grading up of the villagers in large scale. The pig farming constitutes the livelihood of rural poor belonging to the lowest socioeconomic strata and they have no means to undertake scientific pig farming with improved foundation stock, proper housing, feeding and management. Pig farming will provide employment opportunities to seasonally employ the farmers and supplementary income to improve their living standards. Looking at the local demand, availability of land for scavenging /grazing, availability of agricultural and kitchen wastes pig farming has great potential in Jaspur. Hen rearing is prevalent among weaker sections of rural population which provides them supplementary and steady income on daily basis besides providing them nutrition hen eggs for family consumption and engaging family labour in their leisure hours to look after thus, can generate employment in the village Jaspur. There should be need well infrastructure of the Sub Centre of Jaspur which should be provided with basic drugs for minor ailments needed for taking care of essential health needs of men, women and children. Awareness on disease should be promoted by Primary Health Centre and Sub Centre. Sub health centre and Anganwadi of Jaspur can take the steps on removing the diseases by providing knowledge of diseases and suitable drugs. They should provide the knowledge to the child as well as house wife of household. Implementation programmes should be implemented by Panchayat, BDO etc. Every BPLs family should hold RSBY card to get the benefit on health checkup. The panchayet and block of Jaspur should take the steps to save the traditional medicinal plants for sustainable health care system. Well maintained toilet are essential for maintaining health and hygiene of the each house of Jaspur.

The quality of Mid-day meal needs to be improved, which will attract children of the weaker sections of the society to the school. Obviously the amount of expenditure of meal will be spend within given fund by the government. Village monitoring committees must be formulated so that they will monitor the enrolment and girls' student absenteeism. The overall attitude of the people particularly the socially and economically backwards towards the education of the girl child needs to be changed. Permanent teachers are necessary in the middle school of Jaspur, because they will spend the more time than Para teacher for teaching to the student. More emphasis on vocational education, open schooling, distance education by the government for literacy level of the village, by that education the interested farmers, house wife, wage labourer can gain knowledge of different fields. Provide quality education including life skills of the villagers. Promoting community participation in primary education by formulating Village Education Committees. And involving them in planning and raising community contribution for primary education. Aiming at bridging social, regional and gender gaps in literacy and primary education. Focuses on girl education and children with special need because more girls are illiterate. Provide computer education to the villagers to bridge the digital divide.

Natural resources management is one of the fundamental aspects sustainable development. Different initiatives are incorporated like: activities such as training, awareness raising and supporting the establishment of village forest reserves or joint forest management by the villagers and forest department of district would help in addressing this issue. Providing Environmental education for improving communities awareness of the value of their natural resources and their options in terms of how to manage them sustainably was widely recognized as being an important initiative. The villagers of Jaspur should land resource management because nutrient holding capacity of soil will increase and it is helpful to the crops as well as plants. Afforestation should be done but the villagers and block of Jaspur. Cutting of trees should be reduced as possible. Angara block of Jaspur can take initiative providing the knowledge on conservation of natural resources. The villagers should take care on animals, birds, plants, village forest, etc. to conserve the biodiversity in a sustainable way.

Development should be seen more as a change from the bottom up than from top down. The development process of Jaspur village should be managed by the villagers as a natural process rather than according to plans, goals, and objectives. Development programmes should aim to strengthen the villagers by the panchayat. New programmes should be chosen villagers of jaspur as well as panchayat according to their ability to increase village development management capacity. Start with a few schemes to solve some immediate local problems to build villagers' confidence and experience. The development process should be supported by local institutions with village panchayats, primary cooperatives, religious, youth, and self-help groups playing a lead role. Any development and programmes of Jaspur village should be implemented by the participation of all villagers and any kind of decision will be taken by the opinion of all villagers and panchayat too.

5. Conclusion

Sustainable Development of Jaspur initiatives incorporating agriculture, health, and sanitation could help to improve the living standard of subsistence farmers in the studied village. Current agricultural practices have been facing many problems as farmers do not have enough farming materials, pest control techniques, or knowledge of agricultural technologies to improve production. The survey found that vegetable production, agricultural technologies, sanitation interventions, and the provision of safe drinking water are in need of improvement. Furthermore, development activities are required from both governmental and non-governmental organizations alike and will require the full participation from villagers and other existent village institutions. The outcome of development and improvement of current agricultural practices will help to generate villagers' income and secure their food security. In addition, development activities related to sanitation and the provision of safe drinking water could improve villagers' health, and as a result, further contribute to increases in household disposable income by decreasing the expenses incurred from expensive medicines and doctor's fees. Furthermore, livestock wastes could be recycled into household fuel (lighting and cooking) through the use of bio-digesters. Such a technology provides an excellent source of renewable energy which can help to decrease villagers' reliance on fire woods and thus save more trees and conserve villages' natural resources from being over harvested. To measure the success and sustainability from the project implementation, the result of this baseline survey will serve as benchmark to measure future participatory monitoring initiatives against and also help the project teams to identify new implementation strategies to improve the ability of the project to meet its objectives.

To sum up, model plan for development of Jaspur village has to concentrate upon the welfare of people residing in village. Human development is the key of this exercise. The potential of Jaspur village has to be developed by motivating people towards growth, through skill development. There should be the all-round progress and upliftment of the very people themselves through a sustainable way and development will be the people centered. Village will become Eco-friendly Village a real relationship between Man & Nature that is truly need to the present. So Jaspur village will be developed into a Sustainable Model Village on its retrospect as well as prospect by the planning.

6. References

- i. Ambedkar S. Nagendra, (1994), Integrated Rural Development Programme Implementation Process, Rawat Publications, Jaipur.
- ii. Ayodhya, P. and K. Papa, (1993), "People-Centred Development through Educational Intervention", Journal of Rural Development, Vol. 12, No. 6, pp.617-632.
- iii. Carain, S. (1993), "Training Grassroots level Workers in Empowering the Rural Poor: The Case of an Indian NGO", The Ittdian Journal of Social Work, Vol. 54, No. 3, pp.3 8 1-392.
- iv. Chander, M. "Farmers' Participation in Rural Development Programmes: Case Studies of some local NGOs in Central Himalayan Region", Journal of Rural Development, Volume 15, Number 3, July September 1996, pp.393-408.
- v. Dhadave, M.S., (ed.), (1996), Rural and Urban Studies in India, Rawat Publications, Jaipur.
- vi. Galab, S, "Rural Employment Programmes Case for Involving Voluntary Organizations", Economic and Political Weekly, Volume 28, Number 10, March 6, 1993, pp.409-4 13.
- vii. Gangrade, K.D., (1997), "Two Models of NGOs in Development at Work", in NoorjahanBava, (ed), Non-Governmental Organizations in Development Theory and Practice, Kanishka Publishers, New Delhi, pp.101-124.
- viii. Mehta, Ajay S., "Micro Politics of Voluntary Action: An Anatomy of Change in Two Villages", Renewal, Volume 3, Number 2, November 1996, pp.3 1-39.
- ix. Mishra, Y. (2002), Empowering People Grassroots Organizations and Rural Development, Kanishka Publishers, Distributors, New Delhi.

- x. Murthy, N. (1988), Two Approaches to Rural Development: Case Study of Sewa and Mahiti, in M.L. Danhvala, et al, (ed), Asian Seminar on Rural Development The Indian Experience, Oxford & IBH Publishing Co. Pvt.Ltd, New Delhi, pp.283-309.
- xi. Pant, N., Pant, L. and Kondo, N. (1994), Role of the Government Bureaucracy and the Nun-Governmental Organization in the Rural Development of India? Joint Research Programme Series No.105, Institute of Developing Economies, Tokyo, Japan.
- xii. Paranjape, P.V., (1984). Grass-Roots Self-Reliance in ShramikSanghatana, Dulia District, India, in Md. Anisur Rahman, (Ed), Grass-Roots Participation and Self-reliance: Experiences in South and South-East Asia A study prepared for the International Labour Office within the framework of the World Employment Programme, Oxford & IBH Publishing Co, in collaboration with Society for Participatorq. Research in Asia, New Delhi.
- xiii. Sangita, S.N., (1990), "Self-Employment Programme for Rural Youth The Role of Non- Governmental Organisations", NMB Management Review, Vol. 5, No. 2, pp. 1-30.
- xiv. Shah, Anil C, and Iyengar, S. (1981), The Contribution of NGOs to Development: Some issues and a Ccrse Study, in M.L. Dantwala, et al (ed), Social Change Through Voluntary Action, Sage Publications, New Delhi pp.92-112.
- xv. Srinivas, M.N., (ed.), (1993), India's Villages, Media Promoters & Publishers, Bombay, Second Revised Edition, Reprinted.
- xvi. Suresh, K.A. and Molly Joseph,(1991), "NGOs as organizers in fighting rural poverty: A Study", Kurukshetra, pp. 17-2 1 & 35.
- xvii. Thill,M., (2011),"Sustainable development and natural resource management through community participation in Maharashtra, India: the case of Ralegan Siddhi",Berlin.
- xviii. Tripathy, K.K., (2011), India's Agricultural Growth and Stagnation: A Review, Kurukshetra, Vol. 60 (2):3-10.