

*Original Research Article*

**DISSEMINATION OF AGRICULTURAL INFORMATION WITH RESPECT TO TRIBAL COMMUNITY**

**ABSTRACT**

This study was conducted in Keonjhar district of Odisha state. Agriculture information management behaviour is to be focussed on the flow of information regarding seeking information on various practice of crops and seeking information on various agri-allied activities. The flow of information is based on the various aspect in which tribal people are most probably involved in transferring information through various methods. The result showed that observed that some respondents were receiving information about cultivation practices 33.33% followed by greengram cultivation practices 29.16% and black gram cultivation practices 25%. And 98.32% are receiving information from AAO followed by VLW(95.83%) and from training programme (54.15%) according to personal sources. According to impersonal sources majority of the respondents 64.33% are receiving information from radio followed by television (61.66%) and newspaper (59.16%). Agricultural information interacts with and influences agricultural productivity in a variety of ways. It can help inform decision regarding land, labour, livestock, capital and management. Agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Hence the creation of agricultural information by extension services, research, education programmes and others are managed by agricultural organizations that create information systems to disseminate information to farmers so that farmers can make better decisions in order to take advantage of market opportunities and manage continuous changes in their production systems. All these information seeking behaviours with respect to ICT, the farmers help them to manage in agricultural and other allied activities.

**Keywords:-** ICT, Agricultural information, livelihood, Decision making ,tribal community etc.

**Introduction:-**

Agriculture acts as the key development in the rise of sedentary human civilization, where by farming of domesticated species creates food surpluses that enables people to survive

and showing them the way of earning. Thus our country is enhancing agro-based industries. Industrial agriculture based on large scale monoculture, which is dominated by agricultural output. Hence it is the dynamically economic improvement of our country with the help of agriculture basing on modern information technology. Information technology means the latest version of information facilities like computer, mass media and Internet. Information technology (IT) or Information communication technology (ICT) is a broad subject concerned with technology and other aspects of managing and processing information. On behalf of advanced modern technology in agriculture supports the following benefits- Higher crop productivity. Decreased use of water, fertilizer and pesticides which in turn keeps food prices down. Reduced impact on natural ecosystem less runoff chemicals into river and groundwater. Increased worker safety.

Information technology contributes much to agriculture and rural development. It facilitates rural activities and provides more comfortable and also saves the rural life with equivalent services to those in urban areas such as provision of distance education, tele-medicine, remote public services, remote entertainment etc. IT initiates new agricultural and rural business such as e-commerce, real estate business for satellite offices, rural tourism, and virtual corporation of small-scale farms. It also supports policy-making and evaluation on optimal farm production, disaster management, agro-environmental resource management etc using tools such as geographic information systems (GIS). It also helps in improving farm management and farming technologies by efficient farm management, risk effective information or knowledge transfer etc realizing competitive and sustainable farming with safe products.

As the world is globalizing, a global knowledge and information society is emerging, spanning all regions, knowledge and information have become significant factors for producing of goods and services. The globalization approach is capital intensive and useful where large tracts of land are involved. Consequently it is more suitable for farming taken up on corporate lines. Due to globalization, there is a real threat for decline in prices of agricultural products. On the other hand a constant increase in crop inputs is also causing a concern for farmers and several farmers have started thinking that agriculture is not a viable occupation. In India globalization has signified Agri-information management. Agri-information management incorporates with these following activities-

- To support the implementation of structured and linked information and knowledge to enable institutions and individuals from different technical backgrounds to build open and interoperable information systems.
- To provide advice on how to best manage, disseminate, share and exchange agricultural scientific information.

- To promote good practices widely applicable and easy to implement.
- To foster communities of practices centered on interoperability, reusability and cooperation.

Agricultural information interacts with and influences agricultural productivity in a variety of ways. It can help inform decision regarding land, labour, livestock, capital and management. Agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Hence the creation of agricultural information by extension services, research, education programmes and others is managed by agricultural organizations that create information systems to disseminate information to farmers so that farmers can make better decisions in order to take advantage of market opportunities and manage continuous changes in their production systems. All these information seeking behaviours with respect to ICT, the farmers help them to manage in agricultural and other allied activities. Even if the odisha farmers are also utilizing their good efforts through gaining information technology and it's application in their farm activities.

Nowdays, information is a basic necessity of everyday life. For anything and everything information is required. Information can be obtained or retrieved from a variety of sources. Farmers constitute a particular group of users where information needs is very specific. The present age has been called as "Information age". Information has become the most important element for progress in society. According to Kemp "Information has been described as the fifth need of man ranking after air, water, food and shelter". Everyone needs information about everything even in day to day life. In agriculture environment relevant and timely information helps farmers community to take right decision to sustain growth of agricultural activities. Use of information in agriculture sector is enhancing farming productivity in a number of ways.

#### **Research Methodology:-**

The study was undertaken in Keonjhar district of Odisha during 2018-19. Keonjhar is a land locked district situated in the northern part of odisha. For the study Ex-post facto research design was used. Keonjhar district is tribal dominated area and it constitutes 44.5% of the total population of this district. Hence this district was selected purposively due to the course of the research study based on behavioural approaches on Agri-information management among tribal people. A research method is a systematic plan for conducting research. Hence research methodology is described as a systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. It



Total	244	174.15	476	396.64	230	191.65	490	408.32	222	184.97	498	414.98
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It revealed from above table 1 that the respondents were seeking less information on crop practices. The main crop of this area is rice. So it was observed that some respondents were receiving information about cultivation practices 33.33% followed by greengram cultivation practices 29.16% and black gram cultivation practices 25%. Some of the respondents were receiving information on marketing i.e. 45.83% in rice, 45.83% also in blackgram and 44.16% in greengram.

**Table 2- Seeking information on major vegetables practised by the respondents**

Receiving information	Tomato				Watermelon			
	Yes		No		Yes		No	
	f	%	f	%	F	%	f	%
Cultivation practices	60	50	60	50	65	54.16	55	45.83
Harvesting	30	25	90	75	45	37.5	75	62.5
Storage	20	16.66	100	83.33	39	32.5	81	67.5
Sorting and grading	25	20.83	95	79.16	35	29.16	85	70.83
Marketing	45	37.5	75	62.5	50	41.66	70	58.33
Total	180	149.99	420	349.99	234	194.98	366	304.99

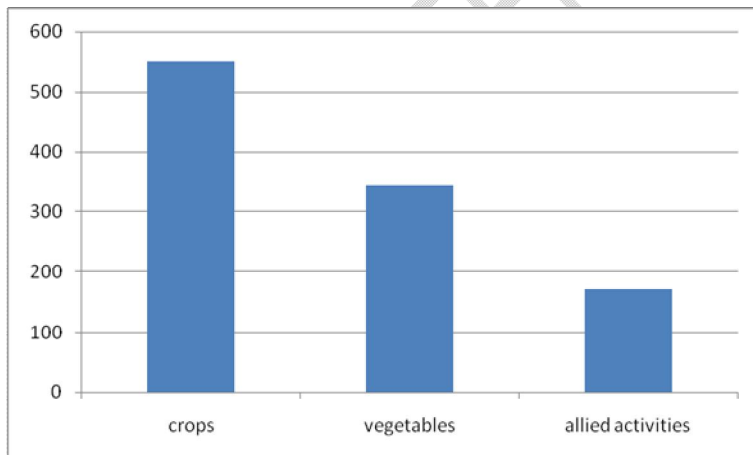
It revealed from table 2 that most of the respondents were seeking information on cultivation practices i.e.54.16% in watermelon cultivation followed by tomato cultivation i.e. 50%. The information about marketing of these two vegetables were relevant to the respondents i.e.37.5% in tomato and 41.66% in watermelon.

**Table 3 Seeking information on allied activities**

Receiving information	Forest products				Receiving information	Goatery			
	Yes		No			Yes		No	
	f	%	f	%		F	%	f	%
Collection	33	27.5	87	72.5	Maintenances of shed	21	17.5	99	82.5
Manufacturing	20	16.67	100	83.33	Protection from disease	29	24.16	91	75.83
Marketing	40	33.33	80	66.67	Marketing	35	29.17	85	70.83
Preparing enterprise	26	21.66	94	78.33					
Total	119	99.16	361	300.83	Total	85	70.83	275	229.16

It revealed from above table 3 that most of the respondents are receiving information about marketing i.e. 70.83% in goatery followed by 33.33% in forest products. The respondents have not sought the information on other practices of allied activities. They can't get good opportunity to enhance these allied activities.

**Graph 1 Receiving information on agri-allied activities.**



The graph revealed that the respondents were receiving information on crop practices followed by vegetables and allied activities. The respondents sought less information for their agri-allied activities compared to the individuals of other areas. The tribals had low literacy level, they can't learn new method of practices. So they were facing many problems in cultivation practices as well as marketing. So that the tribal farmers can't get remunerative price of the product and they also much time to do agri-allied practices.

**Source of flow of information**

It is defined as the receiving agricultural information from various sources. These source are distinkted as personal and impetrsonal sources.

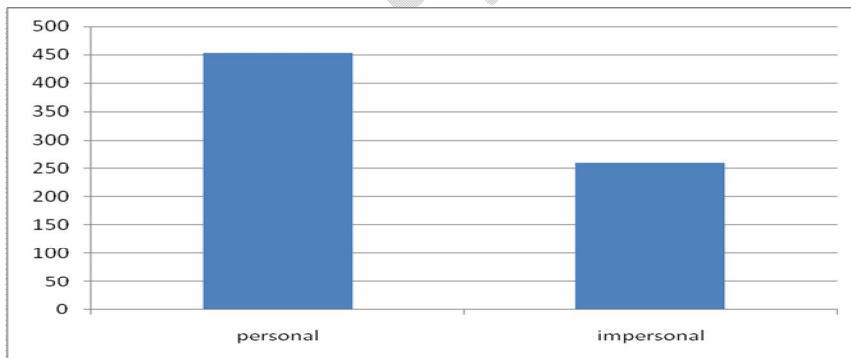
**Table-4 On the basis of source of flow of information (n=120)**

Sl.no	Sources	Most frequently		Frequently		Occassionally		Rare		Never		Total	
		f	%	f	%	f	%	f	%	f	%	f	%
(A)	<b>Personal</b>												
	VLW	36	30	49	40.83	30	25	5	4.17	0	0	115	95.83
	AAO	59	49.16	44	36.66	15	12.5	1	0.83	1	0.83	118	98.32
	KVK	0	0	2	1.66	45	37.5	4	33.33	33	27.5	47	39.16
	SMS	12	10	0	0	31	25.83	4	35	37	39.16	31	25.83
	Neighbours	10	8.33	37	30.83	25	20.83	3	29.16	11	9.16	74	61.66
	Exposure visit	0	0	14	11.67	35	29.17	3	29.16	46	38.33	59	49.17
	Exhibition	0	0	1	0.83	34	28.33	4	37.5	40	33.33	35	29.16
	Training programme	1	0.83	11	9.16	53	44.16	4	34.16	14	11.66	65	54.15
(B)	<b>Impersonal</b>												
	1.newspaper	9	7.5	30	25	32	26.66	1	10	37	30.83	71	59.16
	2.radio	12	10	12	10	9	7.5	3	31.67	49	40.83	33	27.5
	3.magazine	3	23.5	28	23.33	21	17.5	2	20	18	15	52	64.33
	4.television	14	11.6	39	32.5	21	17.5	1	12.5	31	25.83	74	61.66
	5.ICT(Inter	4	3.33	21	17.5	31	25.83	2	18.33	42	35	56	46.66

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Table-4 revealed that majority of the respondents 98.32% are receiving information from AAO followed by VLW(95.83%) and from training programme (54.15%) according to personal sources. According to impersonal sources majority of the respondents 64.33% are receiving information from radio followed by television (61.66%) and newspaper (59.16%).

**Graph- 2 Data revealed for seeking information from personal sources and impersonal sources.**



Graph 2 revealed that most of the respondents receive information from personal sources. They were seeking less information from impersonal sources. Personal sources are dominated over impersonal sources. Most of the respondents were not updated with modern technology, they had no idea about the use of internet. So that they were seeking information from personals sources.

The candidate manuscript does not have a robust scientific discussion, I suggest the authors incorporate the suggested paragraphs, in this way it would improve the scientific quality of the manuscript.

The dissemination of agricultural information plays a crucial role in improving agricultural practices and promoting sustainable development among tribal communities in India and Latin America. This paper explores the scientific discussion surrounding this topic and compares it with the socioeconomic, cultural, and agricultural factors specific to Latin American studies. By understanding the context in which agricultural information is disseminated, we can identify the challenges and opportunities in effectively reaching and engaging tribal communities.

#### Importance of Agricultural Information Dissemination

The availability and accessibility of accurate and up-to-date agricultural information are essential for tribal communities to make informed decisions regarding their farming practices (Cortez et al. 2016a; Camacho et al. 2018; Olivares, 2022). Scientific research provides valuable insights into innovative techniques, pest management strategies, crop selection, and sustainable agricultural practices (Cortez et al. 2016b; Orlando et al. 2018; Hernandez et al. 2020). Disseminating this information effectively ensures that tribal farmers can benefit from these advancements, leading to increased agricultural productivity, food security, and economic well-being (Hernandez et al. 2018; Guevara et al. 2012a; Hernández and Olivares, 2020).

#### Challenges in Disseminating Agricultural Information

Disseminating agricultural information to tribal communities in Latin America presents several challenges due to the unique socioeconomic and cultural factors prevalent in the region (Montenegro et al. 2021a; Olivares, 2014a). Language barriers, limited access to technology and infrastructure, low literacy rates, and traditional farming practices are some of the obstacles that impede the effective transfer of knowledge (Olivares, 2014b; Olivares and Hernández, 2019a; Montenegro et al. 2021b). It is crucial to address these challenges by employing culturally sensitive and context-specific approaches to disseminate agricultural information successfully.

#### Socioeconomic and Cultural Factors

Latin American studies have highlighted the importance of considering socioeconomic and cultural factors when disseminating agricultural information to tribal communities (Olivares et al. 2017a). These factors influence the way information is received, understood, and adopted by the communities (Olivares et al. 2017b). The paper examines case studies and research findings that emphasize the need to incorporate traditional knowledge, indigenous practices, and community participation in information dissemination processes. By respecting and integrating local customs and beliefs, agricultural information can be communicated in a manner that resonates with tribal communities, ensuring greater acceptance and adoption (Orlando and Franco, 2015; Pitti et al. 2021).

#### Agricultural Factors

In addition to socioeconomic and cultural factors, agricultural aspects specific to Latin America must be taken into account when disseminating agricultural information to tribal communities (Rodriguez et al. 2015; Zingaretti et al. 2016). Latin America boasts diverse agroecological zones, crops, and farming systems, each with its own unique characteristics and challenges (Olivares et al. 2020; Hernandez et al. 2017; Olivares and Cortez, 2017). The scientific discussion on agricultural information dissemination must acknowledge this diversity and tailor information accordingly. By providing region-specific guidance and solutions, agricultural information becomes more relevant and applicable, leading to enhanced adoption and impact (Olivares, 2017; Olivares and Hernández, 2019b).

The dissemination of agricultural information to tribal communities in Latin America is a multidimensional process that requires an understanding of scientific, socioeconomic, cultural, and agricultural factors (Guevara et al. 2012a; 2012b). This scientific paper has explored the importance of effective information dissemination and the challenges faced in reaching tribal communities. By considering the unique context of Indian and Latin American studies, this paper highlights the significance of incorporating traditional knowledge, respecting cultural diversity, and providing region-specific guidance. By addressing these factors, agricultural information dissemination can be improved, leading to sustainable agricultural practices, increased food security, and improved livelihoods for tribal communities in Latin America and India. Further research and policy development in this field can build upon these insights to foster more inclusive and impactful agricultural information dissemination strategies.

## Conclusion

. The research study ~~is~~is based on the analysis of the seeking strategy of information for the tribal farmers. The present era is ~~basing~~based on information technology. So that in many areas the farmers can be relevant to the technology and they can try to improve the productivity in agri-allied ~~sectors~~sectors. But my research area is underprivileged. They are suffering with a lack of education, a lack of financial assistance, and also lack of arrangement of demonstration and ~~training~~training programme. It was observed ~~from the study~~ that the tribes were receiving less information on various agri-allied activities. Most probably these tribes were dependent on forest products. But they can't get financial support and other provision for proper marketing of the products. They were only accepting information on rice cultivation. Other ~~activities~~ did not have assisted by the demonstration programme. So that they had lack of opportunities ~~for continuing~~ vegetable cultivation practices and allied- activities.

~~The study~~The study with limited resources, mobility, and specific time period ~~due to academic and financial compulsion~~, definitely unfolded the importance areas ~~of~~of the Agri-information management ~~behaviour~~behavior of tribal farmers in Keonjhar district of Odisha. The study was conducted in particular area and left untouched vast areas which can ~~be identified~~be identified and evaluated in other studies.

The study revealed the personal and impersonal sources of information for the respondents. The personal sources belonged to VLW, AAO, Farmer's cooperative society, training programme, KVK, SMS, exposure visit, neighbor etc and the impersonal sources belonged to Mass media and ICT. From this study it was observed that the tribes were mostly dependent on personal sources. Personal sources are dominated over impersonal sources. They were not seeking information from impersonal sources due to lack of education, lack of availability of financial assistance and demonstration.

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I suggest adding recent references which address the issue in question in Latin American territories. Suggested citations are for genuine scientific reasons that emphasize the current topic of study in context:

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