

Assessing Stakeholders Integration in Practicing Agricultural Extension System in Selected Districts of North Gondar Zone

Beyene Derso, Kibrom Adino, Haimanot Atinkut, and Mohamed Gedefaw

Lecturer, College of Agriculture and Rural Transformation, University of Gondar

Abstract- There is a need for an integration of stakeholders that are dealing with agricultural development in problem identification, planning, implementation and evaluation. This integration and regular share of knowledge and information among them could bring sustainable agricultural development. However, these holistic approach performances were not assessed and documented for future improvement in Amhara Region, North Gondar. In light of this, the study look into the stakeholders' integration existed in agricultural extension practices in north Gondar zone, located at North of Amhara region. The objective of the study is to assess the existing stakeholders' integration in Agricultural extension practice in the study area. The sampling procedure followed multi-stage sampling to draw three woredas out of 23 woredas, (one from Dega, one from woyana Dega, and one from kola were selected purposively). With regard to data type and source, both primary and secondary data as well as qualitative and quantitative data were collected. In addition to respondents' interview, focus group discussion, key informants interview and case studies were used for qualitative data analysis. Descriptive statistics of mean, standard deviations and percent was applied. For statistical tests, chi-square and T-test were employed. As a conclusion, though the main stakeholders that has to be involved in agricultural extension practices supposed to be ample; their integration is very weak and the majority of the organization was not participated regularly in all activities. At the same time, the level of Inter-organizational linkage and coordination is very weak, stakeholders didn't work together to practice agricultural extension because of not giving due attention, The mandate of Coordination was give to woreda and zonal administrators Based on our conclusion we adhered for the relevance of integration in agricultural extension practices and therefore there should be strong integration and any responsible bodies must do to strengthen the linkage of them, should be regular participation and strong inter-organizational linkage of stakeholders to practice the activities of agricultural extension, every stakeholder must give due attention and work together to practice Agricultural extension, for effective integration stakeholders must have prepared and approved modality in to practice, for effective integration, stakeholders should be empowered and different mechanisms must be used for sharing information and other new practices, the coordination of stakeholders must be given to the responsible bodies independently and stakeholders must be participated whenever necessary in the fiscal year.

Index Terms- Stakeholders integration, Agricultural Extension practices

I. INTRODUCTION

In Ethiopian, Agriculture contributes 50% of gross domestic production (GDP), employs 85% of the population and the main income-generating sector for the majority of the rural population. It also serves as the main source of food and generates 90% of the foreign exchange earnings. It provides raw materials for more than 70% of the country's industry (Getahun, 2004).

Even though different extension approaches have been implementing, Ethiopian agriculture is characterized by low productivity, and the experiences over the past four decades did not bring major impacts on the productivity of smallholders and it has been unable to produce sufficient quantities to feed the country's rapidly growing population (Dercon, 2000).

One of the reasons is low level of technology transfer and adoption. Moreover, much of the agricultural research and extension over recent decades has failed in noticeable improvement of poor people's livelihoods. But even without the support of research and extension services, farmers can and do adapt to changes in their environment. Many farmers are natural innovators, some more than others. The key is to recognize these innovations and to integrate them into agricultural research and development (Amanuel, 2007).

It is important to bring the various stakeholders together, to bring the policy makers, the politicians, the legislators, the administrators, researchers, Extensionists, farmers, etc. on board they must understand the concept, the theories, methods involved within research and development. If we bring them together to the same table, they can understand, they can appreciate, the merits of this holistic approach. To be institutionalized in the research and development approach. It must be planted and nurtured and then agriculture can be sustainable (Alex, 2007).

In north Gondar, crop production, animal production and water and soil conservation activities have been practicing. For the improvement of those practices, agricultural extension services have been providing trainings and inputs as well as supervision up to the local level. Research and some NGOs, also have been trying to support farmers by demonstrating new technologies and providing training (NGZAD, 2015).

Research-Extension-Farmer Advisory Council (REFAC) meeting held once per 6 months at zonal level and exchanging ideas on field days at some localities. Even though, these

activities have been done, government sectors, private organizations, NGOs, farmers, universities, etc. integration such as information exchange, knowledge and experience sharing in planning, implementing and evaluation in agricultural development process was not as such seen strong (NGZAD, 2015).

In light of this, the study will assess the current stakeholder's Integration and their linkage / how they interact and what linkages exist among them/. Assessing the existing stakeholders' linkage in implementing Agricultural Extension in the study areas need to be studied, but systematical and empirical study was not attempted so far. Therefore, the proposed study addresses this research gap and tries to make empirical inferences to provide valuable research outputs, that could be used by stakeholders who are participating in agricultural development process as well as policy makers in planning appropriate mechanisms that would improve actors integrations, knowledge and information sharing in order to achieve agricultural development.

II. METHOD AND APPROACHES USED

1.1. Description of the study area

Location: The study was conducted in North Gondar Zone, Amhara National Regional State (ANRS) and representative sample woredas were three of which Wogera from Dega, Chilga from Woyna Dega and Metema from Kola Districts.

1.2. Sample and sampling technique

- ✓ To select the sample from each organization at local, woreda and zonal level, multistage sampling technique was applied. North Gondar zone contains 23 woredas. In the first stage of sampling, woredas was stratified according to their agro-ecology such as Dega, Woyna Dega and Kola.
- ✓ In the second stage, 3 representative woredas that is 1 from Dega, 1 from woyna Dega and 1 from kola and 6 sample kebeles (2 Kebele in each woreda) was selected purposively. In the third stage of sampling, stakeholders were listed at all levels and taken 120 sample respondents from each stakeholder by using simple random sampling method.

1.3. Data Types, Sources and method of collection

- ✓ In this study, qualitative and quantitative as well as primary and secondary data was collected. The primary quantitative data was collected from the respondents using a pre- tested, structured interview schedule, discussions and personal observations. This interview schedule for primary data includes open-ended and closed-ended questions. Secondary quantitative data were collected through reviewing documents from documents, studies, records and reports of Kebele, Woreda and zonal representative farmer's organizations, NGOs and GOs offices.
- ✓ Qualitative data was collected through discussions with focus groups and key-informants, observations and case studies. In order to investigate detailed information, group discussion was carried out in each Kebele, woreda and at zonal level based on the check list that

was prepared. In addition, discussion with Kebele, Woreda and zonal officials, DAs and concerned woreda Agricultural office experts were also conducted.

1.4. Methods of Data Analysis

- ✓ Following the completion of the data collection, the data was coded and entered in to statistical Package for Social Science (SPSS version 20) computer program for analysis. Qualitative data was analyzed using different qualitative statistical procedures and methods. Descriptive tools were supplemented by qualitative analytical methods like interpretation and explanation of various opinions, views and concepts; and summarizing, categorizing, and presentation of these in convenient forms and descriptive statistical tools were used to analyze the quantitative data. The important statistical measures that are used to summarize and categorize the research data was means, percentages, frequencies, standard deviations, chi-square and T-Test.

III. RESULTS AND DISCUSSIONS:

In this part, the results of focused group discussion, key informant interview and survey were presented and discussed. The descriptive analyses were done to describe the existing stake holders' integration for Agricultural extension practices in north Gondar Administrative zone. The significance of the result was tested by using Chi-square and T -test.

1.5. Personal Characteristics of respondents

Under personal characteristics of the respondents, Age, Sex, Educational level, Religion, occupation, marital status and family size were seen. When we see the age of the respondents, it is the number of completed years of the respondents from the time of birth till the time of the survey conducted. Table 1 below shows that 47.5% of the respondents were within the age group of 15-30 years, 33.3% in between 31-45 years, 18.3% in between of 46-60 years and the rest 0.8% were above 60 years old. It implies the majority of the respondents were between 15-45 years old. When we see the sex of the respondents, 63.3 % were male and 36.7% were female. So, the majority of the respondents were male.

Educational level is refers to the grades completed through formal schooling. As to table 1 below shows, it was found that from the total respondents about 3.3% were able to read and write, 6.7% belonged to grade 1-8, 4.2% were between grade 9-12, 18.3% were diploma holder, 55.8% were degree holder and the rest 11.7% were masters holder. This implies the majority of the respondents were degree holder. With regarding to Religion, 94.2% of the respondents were follower of Orthodox, while 4.2% of the respondents were followers of Muslim and the rest 1.7% were other religion followers. This implies that the vast majority of the respondents were followers of Orthodox religion. Concerning occupation, as the table 1 below shows, from the total respondents about 40% was engaged in agriculture, where as the rest 60% were non agriculture. The result shows, the majority of the respondents were engaged in the field of non agriculture.

As far as their marital status is concerned, the respondents were categorized as single, married, divorced and widowed. However, the result of the conducted survey shows, the respondents have fallen under three categories only, as single/never married, married, and divorced. 62.5% were married, 32.5% were unmarried, and the rest 5% were divorced.

This implies that the majority of respondents were married. Table 1 below shows, 72.5% of the respondents had 1-4 family members, 25% had 5-8 family members and the rest 2.5% had above 8 family members. It implies that the majority of the respondents had 1-4 family members.

Table 1: Distribution of Personal Characteristics of respondents

No	Personal Characteristics	Attributes	Frequency	Percent
1	Sex of the respondents	male	76	63.3
		female	44	36.7
		Total	120	100.0
2	Age of the respondents	15-30	57	47.5
		31-45	40	33.3
		46-60	22	18.3
		>60	1	0.8
		Total	120	100.0
3	Educational level	write and read	4	3.3
		1-8 grade	8	6.7
		9-12 grade	5	4.2
		diploma	22	18.3
		degree	67	55.8
		above degree	14	11.7
4	Respondents marriage	Total	120	100.0
		married	75	62.5
		not married	39	32.5
		divorced	6	5.0
5	Family number	Total	120	100.0
		1-4	87	72.5
		5-8	30	25.0
		>8	3	2.5
		Total	120	100.0
6	Religion	orthodox	113	94.2
		Muslim	5	4.2
		other	2	1.7
		Total	120	100.0
7	occupation of respondent	agriculture	48	40.0
		none agriculture	72	60.0
		Total	120	100.0

Source: own survey, (2016)

1.6. Stake holders Participation in Agricultural extension Practices

It is expected that all stakeholders must participate in different agricultural extension activities to bring sustainable agricultural development through effective implementation of agricultural extension system. The respondents have been asked to respond their organizational participation in agricultural activities. As table 2 below shows, there are activities which are grouped under planning, implementing, monitoring and follow up, evaluation and impact assessment. The majority of the

respondents responded that their organization was not participated regularly in all activates. Some were participated some times, some were participated rarely and some were not participated at all activities. As we have discussed from Focus group discussants and key informants, there was no regular participation of stakeholders in different agricultural activities. As they have said the stakeholders did not give due attention for this matter and some stake holders didn't participate for practicing agricultural extension at all.

Table 2: Stake holders Participation in Agricultural extension activities

No	Characteristics	Always		Some times		Rarely		None	
		F	%	F	%	F	%	F	%
1	Problem identification	36	30.0	52	43.3	24	20.0	8	6.7
2	Discussion on prioritization activities	44	36.7	42	35.0	23	19.2	11	9.2
3	Revision of plan	15	12.5	53	44.2	31	25.8	21	17.5
4	Provision of information for planning	41	34.2	45	37.5	23	19.2	11	9.2
5	Field visiting	17	14.2	58	48.3	30	25.0	15	12.5
6	Participation in field days	9	7.5	51	42.5	33	27.5	27	22.5
7	Participation in demonstration	17	14.2	40	33.3	29	24.2	34	28.3
8	Follow up of activities	30	25.0	47	39.2	30	25.0	13	10.8
9	Mobilization for planed extension work	39	32.5	21	17.5	28	23.3	14	11.7
10	Mobilization for planed extension work	21	17.5	28	23.3	57	47.5	14	11.7
11	Result evaluation	33	27.5	56	46.7	20	16.7	11	9.2
12	Identification of weak and strong side	30	25.0	54	45.0	24	20.0	12	10.0
13	Discus on result and weak side	27	22.5	48	40.0	31	25.8	14	11.7
14	Provision of information for others	33	27.5	46	38.3	26	21.7	15	12.5

Source: own survey, (2016)

1.7. Inter-organizational linkage in agricultural extension practices

As we know, there has to be a very good Inter-organizational linkage to practice agricultural extension system to bring sustainable agricultural development. As table 3 shows, 17.5% of the respondents said there was very poor linkage to practice agricultural extension, 52.5% of them responded there was poor linkage, 12.5% of them said there was good linkage and the rest 17.5% of the respondents have said there was very good linkage to practice agricultural extension. It implies, the majority of the respondents were not agreed about the very good

inter-organizational linkage in practicing agricultural extension system. As far as stakeholders coordinator and stakeholders participation in planning, implementing, monitoring and follow-up, evaluation and impact assessment is concerned, the majority of the respondents responded that there was poor coordination and poor participation of stakeholders in practicing agricultural extension activities to bring sustainable agricultural development. This result was also supported by the focus group discussants and key informants. As they have said there was no good linkage and coordination of stakeholders to practice agricultural extension practices.

Table 3: Inter-institutional linkage in Agricultural extension practices in the year 2015/16

No	particulars	V. poor		poor		good		V. good		excellent	
		f	%	f	%	F	%	f	%	f	%
1	linkage to practice AEA	21	17.5	63	52.5	15	12.5	21	17.5	-	-
2	stakeholders coordinator	12	10.0	72	60.0	15	12.5	21	17.5	-	-
3	participation in planning	21	17.5	78	65.0	15	12.5	6	5.0	-	-
4	participation in implementation	6	5.0	66	55.0	39	32.5	9	7.5	-	-
5	participation in monitoring and follow up	12	10.0	75	62.5	33	27.5	-	-	-	-
6	participation in evaluation	9	7.5	66	55.0	36	30.0	9	7.5	-	-
7	participation in impact assessment	27	22.5	57	47.5	30	25.0	6	5.0	-	-
Total											

Source: own survey, (2012)

1.8. Stakeholders' responsibility and work together in Agricultural extension activities

The respondents were asked to respond whether they have responsibility for integration or not. Table 3 shows that the majority (77.5%) of the respondents revealed that their organization is responsible for integration to perform agricultural

extension activities but 69.2% of the respondents responded that the stakeholders of agricultural extension didn't work together to practice agricultural extension. This result was also supported by key informants and focus group discussants. As they have said, the stakeholders' involvement was very poor and they didn't work together for practicing agricultural extension.

Table 4: stakeholders' responsibility and work together in Agricultural extension activities

No	Particulars	yes		No	
		frequency	%	frequency	%
1	Responsibility of your organization for integration	93	77.5	27	22.5
2	Stakeholders working together in AEA	37	30.8	83	69.2

Source: own survey, (2016)

1.9. Reasons why stake holders do not work together

As we have said, stakeholders know about their responsibility for integration to work together to practice agricultural extension for sustainable Agricultural development. We have asked the respondents about why they didn't do Agricultural activities together. As table 4 shows, 60.8% of the respondents revealed that stakeholders didn't work agricultural extension activities together because of not giving due attention,

6.7% were due to lack of awareness and 1.7% were due to no interest but 30.8% of the respondents responded that stakeholders have not performed agricultural extension activities together due to some other reasons. The group discussants and key informants have discussed by giving due attention for this regards. The majority of the group members agreed that most of the stakeholders didn't give due attention for agricultural extension activities and not work together to practice it.

Table 5: Reasons stakeholders do not work together

No	particulars	no awareness	do not give due attention	no interest	others	Total
1	frequency	8	73	2	37	120
2	%	6.7	60.8	1.7	30.8	100.0

Source: own survey, (2016)

1.10. Objectives of stakeholders Integration

There are different types of objectives for the integration of stakeholders. The respondents were asked whether they know

those objectives or not. As the result of table 5 shows, the vast majority of the respondents know about the objectives of stake holders' integration in agricultural extension practices.

Table 6: Objectives of stake holders' integration

No	particulars	Yes		No	
		frequency	%	frequency	%
1	To receive current information	107	89.2	13	10.8
2	to transfer current information for others	105	87.5	11	9.2
3	to share experience and information	106	88.3	14	11.7
4	to improve client based services	105	87.5	15	12.5
5	to supply input	112	93.3	8	6.7
6	to provide credit	98	81.7	22	18.3
Total					

Source: own survey, (2016)

1.11. Presence of formally established and approved working modality:

It is defined as the presence of modality which stakeholders agreed up on and hold it. So, there should be a Modality which is agreed up on by all stakeholders for integration and they must be governed by this modality. As we see from table 6 below, 52.5% of the respondents responded that there was no modality which was prepared for stakeholders' integration whereas 47.5% showed that it was prepared for the purpose of stakeholders' integration. Regarding formal establishment and agreed upon it, 40% of them have said, there was formal preparation of the

modality and agreed up on by the stake holders and the rest 60% of the respondents have said that there was no formal preparation of the modality and this modality was not agreed up on by the stakeholders. It indicates that the majority of the respondents showed there was no modality which was prepared formally and agreed up on by the stakeholders. The majority of the respondents' idea was also supported by key informants and group discussants. As they have said, there was no modality which formally prepared and agreed up on by the stakeholders for the purpose of Agricultural extension work.

Table 7: Formally established and approved working modality for integration

No	Particulars	Yes		No	
		frequency	%	frequency	%
1	presence of modality for integration	57	47.5	63	52.5
2	Formally established and agreed up on	48	40.0	72	60.0
	Total				

Source: own survey, (2016)

1.12. Mechanisms of information sharing between stake holders in Agricultural activities

There are different mechanisms which stakeholders can use to share the new ideas, practices, knowledge, and systems and so on. So, the respondents were asked to tell which methods/mechanisms they use to share new knowledge/information between them. So table 7 below shows that, 70.8% of the respondents revealed that stakeholders conducted meeting to share new information/knowledge, 10% of them said, stakeholders used telephone to share new information, 15.8% said letter was used by them and the rest 3.3% of the

respondents have said that meeting, letter and telephone were used by the stakeholders to share new information. This implies that the majority of the respondents have indicated meeting was the means to share new information between stakeholders. The question was also raised for group discussants to know the mechanisms which stakeholders used to share new information, practices, knowledge and working culture for agricultural extension practices. So the discussants revealed that the majority of the stakeholders used irregular meetings for this purpose. As they have said it was also conducted when it is necessary.

Table 8: Mechanisms of sharing information between stakeholders

no	Particulars	meet if necessary	Telephone	Letter	All	Total
1	frequency	85	12	19	4	120
2	%	70.8	10.0	15.8	3.3	100.0

Source: own survey, (2016)

1.13. Level of Stakeholders' integration for information exchange

Table 8 below shows the level of stakeholders' integration for information exchange in agricultural extension practices. The result shows that 26.7% of the respondents revealed that 18.3% of the respondents have said there was high level of integration

for information exchange, 47.5% responded there was medium level and the rest 34.2% of the respondents revealed there was low level of integration for information exchange. There focus group discussant and key informants showed there was low level of integration and their organization has not highly empowered and influential for information exchange.

Table 9: Level of Stakeholders' integration for information exchange

No	particulars	High		medium		low	
		F	%	F	%	F	%
1.	Level of integration	22	18.3	57	47.5	41	34.2

Source: own survey, (2016)

1.14. Stakeholders' participation in agricultural extension activities in the year 2015/16

Stakeholders must participate in the activities of agricultural extension so many times in a fiscal year, because the

activities will be performed different times in a year. But as we see from table 9 below, the majority of the stakeholders were not participated more than once a year in planning, farmers' field days, coordinating and visiting tasks and in result evaluation.

Table 10: stakeholders' participation in the year 2015/16

No	particulars	Numbers of participation in a year							
		0		1		2		≥3	
		F	%	F	%	F	%	F	%
1	participation in annual planning	32	26.7	54	45.0	23	19.2	11	9.1
2	participation in farmer field day	39	32.5	37	30.8	21	17.5	23	19.2
3	participation in coordinating tasks	35	29.2	35	29.2	18	15.0	32	26.7
4	participation in task visiting	39	32.5	36	30.0	24	20.0	21	17.6

5	participation in result evaluation	38	31.7	42	35.0	24	20.0	16	13.3
	Total								

Source: own survey, (2016)

1.15. Responsibility for stakeholders' coordination

The respondents were asked to respond who was the responsible body for coordination of stakeholders in agricultural extension practices. As table 10 shows, 40% of the respondents revealed Agricultural office was the coordinator for stakeholders integration, 4.2% responded farmer cooperatives was the coordinator, 55.8% revealed woreda/zonal administrator were the

coordinator of stakeholders in agricultural extension practices. It implies that the majority of the respondents showed woreda/zonal administrators were the coordinators of stakeholders' integration in agricultural extension practices. Group discussants and key informants also said that this task was not run independently but it was run together with other tasks by the administrators and to this effect, it was not that much effective.

Table 11: Responsibility for stakeholders' coordination

No		agriculture office	Farmers' cooperatives	administrator	Total
1	frequency	48	5	67	120
2	%	40.0	4.2	55.8	100.0

Source: own survey, (2016)

IV. CONCLUSIONS AND RECOMMENDATIONS

1.16. Conclusion:

Stakeholders' integration/Actors linkage is very important for practicing agricultural extension to bring sustainable agricultural development. In agricultural extension system there are diversified activities which are performed to satisfy farmers' needs and aspirations. So it needs strong linkage of agricultural extension stakeholders to do these diversified activities.

As the survey result indicated, the age of majority of the respondents were found under the age of 15-45 years and the majority of the respondents were male. When we see the educational level, religion, marital status and family size of the respondents, the majority of them were degree holder, followers of Orthodox religion, married, and 1-4 family members respectively.

Stakeholders Participated in Agricultural extension Practices in many dimensions, such as planning, implementing, monitoring and follow up and evaluation. So, as the result indicated, the majority of the organization was not participated regularly in all activates. Some were participated some times, some were participated rarely and some were not participated at all activities.

As we have seen the result of the level of Inter-organizational linkage and its coordination, the majority of the respondents were not agreed about the very good inter-organizational linkage to practice agricultural extension and they said there was poor inter-organizational linkage. As far as stakeholders coordination and their participation in planning, implementing, monitoring and follow-up, evaluation and impact assessment is concerned, the majority of the respondents responded that there was poor coordination and poor participation in practicing agricultural extension activities to bring sustainable agricultural development.

As the existing Actors' linkage in Agricultural extension practices have been seen, Stakeholders' responsibility for Agricultural extension activities and the way they work together was assessed.

Every stakeholder must know that they are responsible for integration and work together in agricultural extension activities and the results indicated that the majority of the organizations were responsible for integration to perform agricultural extension activities but they didn't work together. The reason why stakeholders do not work together was also asked and the result showed that the majority didn't work together because of not giving due attention and for some were due to lack of awareness. It was also asked whether they have prepared and approved working modality or not by them for their integration. But as the study result indicated, the majority of the respondents showed that there was no modality which was prepared formally and agreed up on by the stakeholders.

Concerning Mechanisms of information sharing between stakeholders, there are different mechanisms which stakeholders can use to share the new ideas, practices, knowledge, and systems and so on. So, the respondents were asked to tell which mechanisms they used. So the result showed that the majority of the respondents have used conduct meeting to share new information, practices, knowledge and ideas. We have seen the level stakeholders' integration for information exchange. The result showed that there was no high integration and their organization has not highly empowered for information exchange. In addition to this the study indicated that the majority of the stakeholders' participation was less than once in a year in planning, farmers' field days, coordinating and visiting tasks and in result evaluation and the responsibility for stakeholders' coordination was given to woreda/zonal administrators and it was supported by focus group discussants and key informants.

1.17. Recommendations

- As we have said stakeholders' integration is very important for practicing agricultural extension to bring sustainable agricultural development and as the study result indicated, the main stakeholders that might be involved in agricultural extension practices were too much. But their integration and participation was very weak. So, there should be strong integration and any responsible bodies must strengthen their linkage and participation.
- In agricultural extension system, there are main activities which must be performed by the stakeholders in a regular base. But as the result indicated, the majority of the organization was not participated regularly in all activates and the level of Inter-organizational linkage and coordination is very weak. So, there should be regular participation and strong inter-organizational linkage of stakeholders to practice the activities of agricultural extension and all stakeholders must give due attention for these critical issues.
- Every stakeholder must know that they are responsible for integration and work together in agricultural extension activities and the results indicated that the majority of the organizations were responsible for integration. But they didn't work together because of not giving due attention and lack of awareness. So, every stakeholder must give due attention and create awareness for whom they have the gap.
- The presence of modality which stakeholders agreed up on and hold it is a mandatory for effective integration. But there is no modality which stakeholders prepared formally and agreed up on it. So, for effective integration stakeholders should prepare, approve and change it in to practice.
- Most of the time stakeholders use conducting of irregular meeting for sharing of information, new ideas, practices and knowledge and there was no high integration, information exchange and their organization was not highly empowered for information exchange. So, for effective integration stakeholders should be

empowered and other mechanisms must be used for sharing of information and new practices.

- Stakeholders' participation in planning, implementing, monitoring and evaluation is less than once in a fiscal year and the responsibility for stakeholders' coordination was given to woreda and zonal administrators. But the coordination of stakeholders must be given to the responsible bodies including Agricultural offices independently and stakeholders must be participated whenever necessary.

REFERENCES

- [1] Alex, L., 2007. Ministry of Agriculture, Animal Industries and Fisheries, Uganda.
- [2] Amanuel, A., 2007. Agri Service Ethiopia. [Online accessed in September, 2010] On line at <http://www.wrenmedia.co...>
- [3] Amanuel, A., 2007. Agricultural innovation system. Agri service Ethiopia. [On line accessed in September, 2010] <http://www.wrenmedia.co...>
- [4] Dercon, S., 2000. Growth and Poverty in Ethiopia in the 1990s: An Economic Perspective, Centre for the Study of African Economies, Oxford University.
- [5] Getahun, D., 2004. Assessment of Factors Affecting Adoption of Wheat Technologies and Its Impact: The Case of Hula Woreda Ethiopia. A MSc. Thesis (Unpublished) Presented to School of Graduate Studies of Alemaya University.
- [6] North Gondar Zone Agricultural department (2015). Annual report.

AUTHORS

- First Author** – Beyene Derso, Lecturer, College of Agriculture and Rural Transformation, University of Gondar
Second Author – Kibrom Adino, Lecturer, College of Agriculture and Rural Transformation, University of Gondar
Third Author – Haimanot Atinkut, Lecturer, College of Agriculture and Rural Transformation, University of Gondar
Fourth Author – Mohamed Gedefaw, Lecturer, College of Agriculture and Rural Transformation, University of Gondar