



Design and implementation of development projects

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Conservation, selection and access to quality seeds

A paper on the experience conducted in Wolayta and Kembatta Zones – SNNPRS

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Founded in 1980, Inter Aide is a French non-governmental organization specialized in the **implementation of development programs**. Our goal is to support the **most underprivileged families** in developing countries by helping them **build the capacities to meet their basic needs**.

The agricultural projects implemented by Inter Aide in Ethiopia

The agricultural projects take place in 3 districts (Woredas) of the Southern Region of Ethiopia (named Southern Nations, Nationalities and Peoples Regional State -SNNPRS), which is located at about 400 km south of Addis Ababa: *Kacha Bira*, *Hadero* (Kembatta Zone) and *Damot Gale* (Wolayta Zone). Inter Aide works in close collaboration with the local organisation RCBDIA in *Ofa* Woreda (Wolayta).



The main objective of these 3 programs is to **improve the food security of the vulnerable families on the short and the long term** and to **enhance the capacities of the local agricultural actors to develop the local production while durably protecting the natural resources.**

Inter Aide first started working in agriculture in Ethiopia 1994, mainly on natural resources conservation. Today, in partnership with the Ministry of Agriculture (MOA) and the traditional local structure “*Iddirs*” (see below), our actions mainly focus on 5 essential and complementary elements in the local context as regard to food security:

1. **Durably protecting the natural resources of the targeted families:** starting from collective (sub-watershed level) and individual farmers’ plot diagnoses, this component aims at restoring and improving the soil fertility through the setup of adapted anti-erosive measures. *In 2008, 1876 farmers have actively been involved in the protection of their lands with a total of 227km of anti-erosive structures built in the year, equivalent to the protection of about 284 hectares of arable lands:*
2. **Facilitating access to fodder:** through the multiplication of well adapted and high yielding leguminous and grass species (*Phalaris*, *local Desho*, *Sesbania spp.*, *Pigeon pea*, *Napier grass*, *Bana grass...*). These varieties are multiplied in backyard nurseries and then counter-planted on the anti-erosive structures (to consolidate them), on the borders of the farmers’ plots (without demanding additional farm areas) as well as on degraded pasture lands. *2 304 families have established a backyard nursery for the multiplication of fodder in 2008*
3. **Strengthening the capacities of the families to conserve, select and access quality seeds:** the project role is to help to restore seeds conservation mechanisms, to encourage seeds selection, to introduce improved seeds varieties through a revolving capital managed by the *Iddirs* and to facilitate a durable access to improved seeds.
4. **Improving and diversifying the agricultural production** through the diversification of techniques and of the agricultural production (yam miniset propagation, vegetable gardening, taro, triticales).
5. *(transversal)* **Enhancing the organisational capacities of the local actors (MOA, Woreda Local Authorities, Iddirs, existing farmers’ groups...)** **to develop the local production and to manage, preserve and extend the support mechanisms for the vulnerable farmers**

In Ethiopia, **Iddirs** are vernacular organisations primarily intended to help members facing difficult situations in day to day life. These are systems based on collective savings, aiming at supporting financially and organisationally the member families in certain circumstances (burial ceremony for instance). Based on mutual understanding and solidarity among members, *Iddirs* constitute the nearly sole traditional entity having a real legitimacy within the community

Content of the document

This document mainly focuses on the 3rd component “**Strengthening the capacities of the families to conserve, select and access quality seeds**”. It presents the current constraints preventing farmers to access quality seeds in the local context, the proposed methodology by the project, the types of seeds promoted, some figures about the last year activities.

Two small notes have been added in appendix:

- A note about the role played by the *Iddir* and the comments of an external evaluation conducted in 2008 on their involvement
- A small success story illustrating the importance of seeds’ conservation for the most vulnerable families

More information about the other components is available on demand

Strengthening the capacities of the families to conserve, select and access quality seeds

1. Current constraints preventing farmers to access quality seeds in the local context

Agrarian studies carried out both in Ofa, Kacha Bira and Damot Gale pointed out that more than 70% of the farmers (and mainly the most vulnerable) are currently selling and consuming all their cereal seeds¹ after the harvesting time. If traditionally farmers used to conserve seeds during the inter-season, those mechanisms were gradually abandoned throughout the last twenty years. The progressive land pressure and the spiral of decapitalisation faced by the majority of the families made them unable to preserve cash or seeds capital after harvest.

Today, access to seeds represents one of the main motives of expenses. Most of the farmers are therefore obliged to resort to local credits at usurious rate (ranging from 50 to 100%) in order to purchase their seeds in June (sowing time) - when the market price is at the highest -, and then to reimburse it in January (harvesting time), - when the market price is at the lowest -. Seeds unavailability at planting time constitutes also the **principal reason for vulnerable farmers to enter into share-cropping**, sharing their plot in order to acquire seeds and labour from well-off farmers. As the product of harvest is then divided between the land owner and the seeds' provider, it becomes very difficult for the more vulnerable families to then start again conserving their seeds.

The seeds' related activities aim therefore at **reinitialising seeds' conservation and facilitate farmer's access to quality seeds**. It focuses on organisational mechanisms for the conservation, selection and storage techniques, introduction of quality seeds and support to seeds producers. The induced effects being:

- Restoring the seeds' availability for the farmers at sowing time
- Contribute to the preservation of the vulnerable families' capital by limiting share cropping, favouring farmers' self sufficiency and autonomy in seeds and reducing the use of usurious credits for the seeds
- Increasing the yields,
- Limiting the effect of seeds quality time-bound deterioration.

Through seeds conservation, the farmers are in a better position to plan for cropping rotation as they are less dependent on cash availability at the planting time². Beyond that, the project focuses on facilitating the development of organisational mechanisms within the communities by the emergence of a representative interlocutor (the *Iddir*) in liaison with the other private and public actors.

2. Methodology

The project approach concerning the "seeds component" is articulated around four main axes:

a. Restoring seeds' conservation

This sequence of activities aims notably at restoring access to seeds by the setup of conservation mechanisms facilitated by the organization of Seeds Conservation Groups (the groups' structure aiming at securing the seeds) and a system of revolving capital of improved seeds managed by the Iddirs. Operationally, the project made the choice to implement this component in collaboration with these local entities as they are the only traditional social organisation existing in the area dealing with social aspects. Let's note that this activity is developed subsequently with a natural resources' component within the same targeted sites following a logic of "*quality seeds on preserved land*".



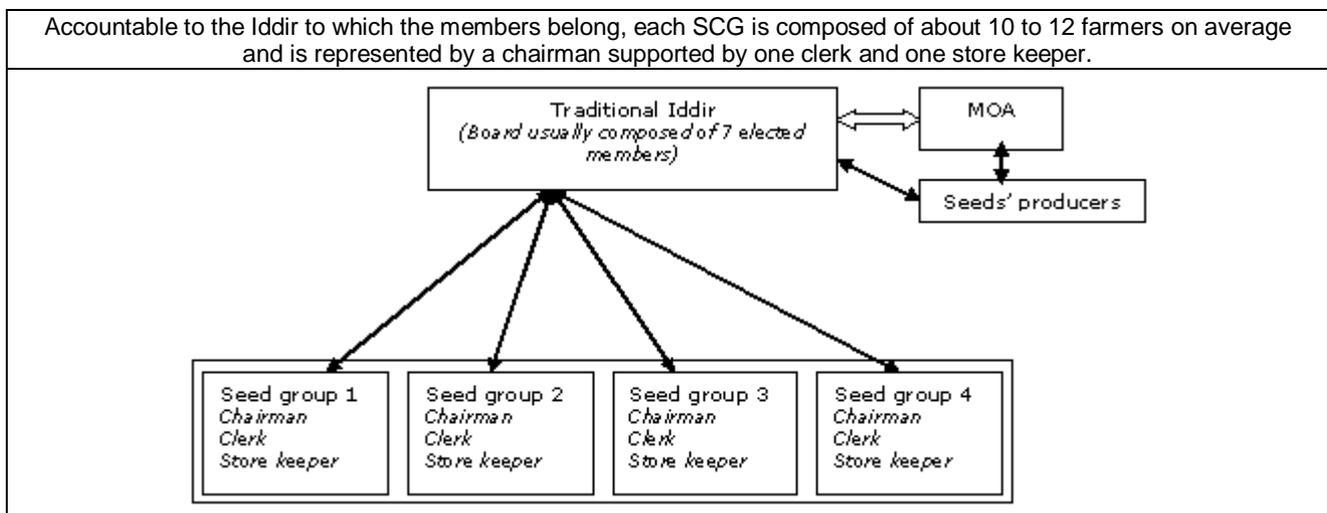
In order to restore these conservation mechanisms, the project first encourages motivated farmers to group with other voluntary peasants and to show their capacities to conserve together a minimum amount of their own seeds, after the harvest. No quantity is really determined, the interest being merely to assess farmers' capacity to secure a minimum amount of seeds together. The volunteer farmers then organise themselves into a Seeds' Conservation Group (SCG) based on their motivation, relationships, trust and vicinity.

A parallel work is made with the interested Iddirs by proposing them to integrate a "seeds' component" in their activities and internal bylaws. A capital of improved seeds is initially given to Iddirs which, in turn, lend

¹ Wheat, teff, barley, but also haricot bean, fava bean, ...

² The crop allotment being more related to a financial logic (difficulty to buy seeds) rather than a strategy of minimising risks.

them to the Seeds Conservation Groups on a revolving basis. The proposed seeds emanate from a selection process as they were beforehand tested and assessed within the local agro-ecologic environment by the experts of the Ministry of Agriculture and the project. In exchange, the group commits to reimburse to the Iddir, the amount of seeds received just after the harvest time, and to conserve at least an equivalent amount within the group. This mechanism allows first to support the SCG in the formation of a seeds capital, then the Iddirs to progressively address requests of new SCG as the loan seeds are repaid back to them. As a community based organisation with a long experience in community assets management, Iddirs facilitate the respect of the commitment regarding the reimbursement and the conservation of the seeds (*the recorded values on the reimbursement rate from the SCG to the Iddir ranging everywhere between 90 and 100%*). Most of the time, the Iddirs decide to integrate the seeds loan and refunding modalities in their internal bylaws. The management of reimbursement is thus ensured by the Iddir which can then progressively extend the access of quality seeds for new groups with a specific attention to consider the most precarious families. The regrouping is overall a mean to “secure” this capital as it is hard for a farmer to break a solidarity established within a group.



b. Favouring the introduction of improved and adapted varieties, in link with Research Centres

If access to seeds is a general concern, the context of the intervention areas differs mainly by the respective altitude of the targeted Woredas (districts). The targeted areas in Kacha Bira and Hadero can be considered as a cereal (wheat) production area, whereas Damot Gale and Ofa shelter a more diversified cropping pattern. **The general objective is to promote an organisational mechanism that can then be used for the conservation and renewal of seeds and planting material in general.** Indeed, this model paves the way to other types of crops such vegetable gardening seeds, taro, triticale, yam³, cassava... Collaboration has notably been strengthened with Areka research center (Enset, taro) and Sawla substation center (on Cassava) to facilitate the introduction of adapted varieties within these communities.

The project proposes to the groups to organize with the Iddirs for the purchase of market-gardening seeds (cabbages, carrots, onions...) or other seedlings, tubers or cuttings. On the techniques, the groups are then backed by the project for the cultivation of these crops (i.e. rapid yam planting material multiplication, vegetable gardening cropping, techniques for Enset multiplication throughout the year, basket compost for cassava...).

³ Although cultivated for years (with notably endemic varieties), little attention has been paid to yam in these areas characterised by recurrent food crises. Yam provides however a valuable potential, particularly interesting during the bridging period, as early matured cultivars can fill seasonal gaps in food supply. Also, yam is highly appreciated by the local farmers notably during the Meskel and offers good food and market value.

c. Promoting seeds' selection

In a context where access to seeds of quality represents a real constraint, the introduction of improved (and "C1") seeds answers the problems of yield decreased observed throughout the years due to the degeneration (and non renewal) of the local seeds. Beyond facilitating the access for the farmers and Iddirs to quality seeds, the project also supports the farmers to better select the conserved seeds in order to slow down the phenomenon of depreciation and maintain the yield. A specific attention is given to the quality of the storage places.

d. Facilitating a durable access to quality seeds

A pilot experience has been undertaken jointly with the MOA on the establishment of local seeds' producers of wheat in 2008. **Generally, the access to seeds of quality represents a real obstacle in Ethiopia.** Despite the recent establishment of "local cooperatives" by the government, there are no effective channels today allowing communities to renew their seeds, nor stable networks between the seed enterprises, the Woredas and the farmers groups. In certain communities, improved seeds have been introduced 3 to 4 years ago by the project and the MOA; and the major stake for Iddir and the seed groups is now to renew their seeds. Moreover, for the local Agricultural Offices (ARDO⁴, which is the local branch of the MOA) to sustain and reproduce the results, **the availability of seeds of quality at the level of the Woreda constitutes an important prerequisite.** Therefore three options are under consideration:

- Reinforce the links between the seed enterprises of Awassa, of Areka and Addis-Abeba, the Agriculture Offices, the Iddirs and local seeds' producers. These companies appear to be interested to supply seeds' producers for a local multiplication provided that the seeds are actually redistributed and that the quality of the production can be validated by the MOA.
- The 2nd option aims at intervening with the co-operatives established in 2006 in order to reduce the disjunctions between the communities and the central co-operative of the Woreda.
- A 3rd option could also be the development of a local production of seeds of quality with the support of the FAO and the involvement of the ARDO. Such collaboration has notably been developed between FAO and Inter Aide in Madagascar on rice seeds production.

Today, an interesting opportunity in supporting seed multiplication groups is provided by the new regional guidelines issued on seeds' multiplication (SNNPRS, 2008). At the same time seed initiatives start to be promoted at Woreda level: the farmers who were previously contracted individually by seed companies and research centres have recently been oriented towards groups for seed multiplication and marketing, opening the way for a decentralized and farming led seed multiplication and commercialization system. The policy change has made this option feasible. However, there is still an important need to develop the physical, technical and managerial capacity of those groups/cooperatives.



1: discussion with representatives of an Iddir of Damot Gale

2: access to planting material for yam is a main obstacle for the local production. The proposed model allows facilitating its access while diffusing technique of rapid multiplication

3: An Iddir leader presents the situation of his community. Supportive tools have been provided to the Iddirs to help them integrating these new responsibilities

4: local conservation system (locally made basket in bamboo) used by a Seed Conservation Group

5: Pigeon Pea (*cajanus cajan*) has also been introduced with the Iddirs (here on an anti-erosive embankment in Damot Gale after 6 months of complete dry)

⁴ Agricultural Resource Development Office – Woreda branch of the MOA under the Woreda Council

3. Main varieties promoted

The following table presents the main varieties that are promoted by the project in accordance with the MOA:

Crop	Variety
Sweet potatoes	Falaha and Dubo1 in Kacha Bira/Hadero
Irish potatoes	Jalana and Wachecha in Kacha Bira/Hadero
Taro	Bolosso1 in Kacha Bira/Hadero
Horse bean	CF-20 DK
Triticale	Minate in Kacha Bira/Hadero
Cassava	Killo – 44/772 (nigeria)
Wheat	HAR 1868, 2536 and 1889 in Kacha Bira/Hadero, and HAR 604 in Damot Gale
Maize	A511
Yam	local varieties
Haricot	OMO-95 (RWR-719) and "Red Wolayta"

4. Some indicators on the seeds' conservation scheme

The following results concern a 3 years' project cycle conducted in 17 kebeles of 3 Woredas (Kacha-Bira, Hadero and Damot Gale). The promotion of the seeds' conservation scheme involving the Iddirs has been developed by Inter Aide in Ethiopia in the beginning of 2006.

The results of this component can be assessed through the following angles:

- First, **the dynamic of the demand**: the table below shows the evolution of the number of SCG and farmers involved in the seeds' conservation for the two main crops of the targeted areas. The community response may be rated as very positive, notably if we make a comparison for the wheat of the number of farmers involved with the total household living in the intervention area: 973 out of 1440 in Kacha Bira and Hadero (68%) and 1.209 out of 2.426 in Damot Gale (49%). The perception of benefits orally expressed and put forward by the farmers are: 1/ the yield of the new varieties introduced through the Iddir 2/ credit is no more needed 3/ "out of a group, no way to conserve at home" (*indeed, the collective aspect is a real guarantee preventing families from consuming their own seeds during the bridging period*).

This dynamic is also revealed in the number of groups formed by Iddirs themselves (representing about 35% of the total number of groups), through the reallocation of the seeds reimbursed by previous seed group members.

Woreda	Crop	2006		2007		2008	
		SCG	Members involved	SCG	Members involved	SCG	Members involved
Damot gale	Haricot bean (Belg season)	7	72	22	180	57	468
	Wheat (Meher season)	33	381	87	842	141	1209
Kacha Bira - Hadero	Wheat (Meher season)	25	295	54	650	80	973
	Horse bean (Meher season)	2	17	19	203	30	298
	Triticale (Meher season)	-	-	-	-	8	96

- Second, **the consistency of the participation**, confirmed by the rather low level of drop outs within the groups: 18% on average in Belg season 2008 in Damot Gale and 9% in Meher season 08/09 and 1% in Kacha Bira – and Hadero. Among wheat groups, 80% of farmers continue to conserve seeds in Damot Gale and more than 98% in Kacha Bira and in Hadero. As concerns haricot bean conservation, the drop out rate may be set at 18% as a whole. A deeper investigation is done to assess the level of vulnerability of the drop out farmers and also to compare the evolution of the groups' "profile" according to the source of their creation (promoted by the project or by Iddirs). The idea behind being that groups created by Iddirs concern certainly farmers less reactive to opportunities and may be basically more vulnerable.

The resistance of the seeds' conservation groups on the last year drought has demonstrated the relevance of instituting collecting seeds' conservation mechanisms. Only one seed group out of 141 "wheat" group faced problem in Damot Gale and zero in Kacha Bira and Hadero. All the other groups have subsisted meaning that, *at least*, the people have access to seeds for the Meher season, without having to decapitalize a step further in order to purchase the needed seeds at the end of the bridging period.

- Third, **the level of the repayment rate**, as testified by a reimbursement rate of 94% in Damot Gale and 100% in Kacha Bira and Hadero. It is not a surprise as Iddirs have a strong expertise in dealing with loans, but it confirms the relevance of the organisational option selected.
- Fourth, **the global benefit this action generates**: savings by avoiding seeds purchase and interest repayment, gain in terms of production with a global yield average measured of 19 quintals/ha instead of 12 for local varieties.

The relevance of this component can also be seen through its **impact on the number of share croppers**. An assessment on the correlation between seed's conservation and sharecropping has been carried out in Kacha Bira on sample basis. The results, presented below, illustrate quite well the importance that represents seeds conservation in the assigned context as it has allowed decreasing by half the number of farmers engaged in sharecropping. These "sharecropping" farmers were obliged to share half of the harvest to the land holder only because they were not able to buy seeds. Most probably, those farmers were among the most vulnerable.

Name of kebele	Iddirs	SCG	Benef. Since 06	Share croppers			Farmers taking a seed credit			Farmers taking a cash credit		
				2005	2006	2007	2005	2006	2007	2005	2006	2007
Burchana	2	6	83	22	20	17	32	18	8	46	36	13
Doreba	2	7	93	45	29	19	37	18	10	16	7	3
Hoda	2	6	111	44	42	25	38	22	7	17	19	8
Homa	2	7	101	43	38	19	22	24	15	21	18	11
Eta	2	5	69	51	37	24	45	25	11	45	25	19
Leini	2	7	82	58	44	21	55	42	21	27	17	4
Hobicheka	2	7	86	15	16	8	15	8	7	27	14	7
Total	14	45	625	278	226	133	244	157	79	199	136	65
				44%	36%	21%	39%	25%	13%	32%	22%	10%

Appendix 1: FROM IDDIRS TO "DEVELOPMENT-IDDIRS"

The idea of "Development Iddir" was first suggested by Ato Getamesay, Project Officer in Damot Gale, in 2005 after some trials on the creation of "Farm Resource Management Groups" to improve access to seeds, seedlings and general agricultural inputs. Indeed, Iddirs constitute traditional bodies (probably the only traditional community representation form) that are recognised and accepted by the community. Added to that, Iddirs have acquired, throughout the time, a valuable experience on management (cash, goods, memberships...). It actually appeared more difficult to rely on tailor-made groups as the solidarity mechanisms required by activities such as collective seeds' management are difficult to initiate and sustain. The process of autonomisation of such "artificial" structure was thus questionable.

Several experiences were already tested in urban area notably on the domain of mutual insurance as described in articles wrote by Alula Pankhrust⁵. But few considerations of the Iddirs as a development actor in rural setups have been reported.

Even tough the model was initiated by the project, it was rapidly put forward by the communities themselves. The project chose therefore to develop the collaboration with the Iddirs on two domains: the natural resources and the seeds' management. Their role can be presented as followed:

Natural resource management:

- the conduction of an initial diagnosis of the natural resources within their sub-watershed
- the prioritisation of the area and the mobilisation of the farmers
- the integration in their bylaws of community rules (in agreement with the community members, the kebele cabinet representatives and the DAs) related to soil conservation and management (individual and collective land)
- the management of a toolbank with the distribution, follow-up and recuperation of the tools
- the assessment of the progress carried out and the update and reorganisation of the plans

On seeds management

- Integrate the seeds' component in their internal bylaws
- Facilitate the organisation Seed Conservation
- Encourage farmers to conserve initial amount of seeds within Seed Conservation Groups (SCG)
- Prioritize and select SCG
- Establish agreements with the SCG on the seeds loan and refunding modalities (including selection of quality seeds)
- Follow and manage the reimbursements
- Follow the commitments of the SCG regarding seeds' selection and conservation

Basic tools have been developed to help the Iddirs in their tasks such as simple mapping for their natural resources' management and simple bookkeeping systems for seeds management. Also, a specific function within the project to support the Iddirs (and the seeds' conservation groups) has been created: the "socio-organiser"; his/her job consisting mainly in helping the Iddirs to reach a level of autonomy in the management of these two domains.

Today, a 3 years' collaboration with the "older partners Iddirs" constitutes a promising experience that could be extended, modelled and replicated. This assessment was shared by an external evaluation conducted in June 2008:

⁵ See notably "Extending Insurance? Funeral Associations in Ethiopia and Tanzania" – 2004 written with Stefan Dercon, Tessa Bold and Joachim De Weerd (OECD DEVELOPMENT CENTRE)

"Using Iddirs as Development Practitioners: experience of the last 3-4 decades shows that project accomplishments (be it food security projects or community water supply projects) that have been accomplished at great cost failed to make lasting impacts in terms of changing people's lives or have turned out to be good examples of good work badly done. This is partly because the communities did not believe in the work done, were not actively involved in implementation activities with a sense of ownership sufficiently developed, or because the required follow up was not forthcoming from the relevant government offices (LDs). The key factor for these failures appears to be lack of effective community involvement and/or lack of follow up support by the relevant offices.

IAF (Inter Aide France) seems to have taken stock of the situation and has, from the start, wanted to make sure that the communities get actively involved in actual program work. The way to make this happen was to involve traditional organizations as effective bridges to ensure community ownership of project work and project achievements. The social role of Iddirs proved beyond doubt their potential role in local development is being increasingly highlighted both in rural and urban areas and seems to be paying off in some places where sufficient effort has been put into bringing about this change.

IAF has gone for maximizing the role of Iddirs as development practitioners in a local project setting. Existing Iddirs in the program Village Units have been approached and with the full agreement of the beneficiary communities and the Iddir leaderships themselves they have been transformed into 'development Iddirs' that would be responsible for all the project activities in their respective VUs. Several sessions of awareness creation training were conducted for the Iddir committees. A total of 60 Iddirs have been transformed into development Iddirs and 300 committee members took part in these trainings. As mentioned above, the training consisted of awareness creation on SWC activities, seed bank management, seed purchasing (vegetable seeds from a local dealer), general management of development activities within the VU, replication of actions, extension of activities to all VU beneficiaries, seed storage management (storage techniques, biological pesticides, aeration, etc.), tool bank management and use of project records as monitoring tools.

The development Iddirs are now managing seed conservation schemes (seed banks), tool banks, water points and ensure that each farmer involved in the project works diligently on his/her farm plot including proper alignment of SWC structures, the structures being dug according to agreed specifications, and properly stabilized through vegetative cover. In the new arrangement the Iddirs committees play the leadership, the coaxing and enforcement role while the IAF animators, Development Agents and peer educators provide the technical support required to get the work done. It is noteworthy to point out that the Iddir committees in all the six VUs where the team had discussions with Iddir committees the latter exhibited confidence that they were taking their new roles very seriously and would continue to do so."

Going further in this evaluation process would be very interesting also because such model could be used as a ground for further activities, provided of course that the bases are strong enough to manage it. Some of the Iddirs have notably evoked the idea of grains conservation. Centralisation of vegetable seeds' orders and organising grouped-purchases with private dealers has been successfully tested in both Woredas. Also, in a neighbored Woreda, an experience has been developed by the local NGO RCBDIA on the certification of communal land by the MOA, relying on a similar approach with the Iddirs.

Appendix 2: An illustration of the importance of the seeds' conservation for the most vulnerable families

The story of Wezro Lega in Kacha Bira



The story of Wzo Lega in Kacha Bira (Hoda Kebele) illustrates quite well the importance for most vulnerable families to have access to seeds. This widow, in charge of her 5 grand-children (aged from 4 to 12 years), was systematically resorting to share cropping on her field since the death of her husband. Having no reserve of seeds at the onset of the planting season, she was lending her land of less than ½ ha to another farmer who provided the seeds and the labour, the harvest then being shared. Last year, with the support of the project, Wzo Lega has conserved initially 12kg of wheat within a seed group. Then, she received 20 kg of improved seeds and, with the support of her neighbours, she was able to directly crop 0,3 ha; having only 0,12 ha remaining in share cropping. As from next year, she plans to cultivate herself her whole farming land as well as to buy one goat. To this extent, she has already planted fodder species on a small backyard nursery (20m² of Bana grass, Vetiver, Phalaris and Elephant grass), on the border of her land (10m of Sesbania and 5m of Lucinia tree) and on the anti-erosive structures (57m of vegetalised structures).

