

**Practical Action –Sudan  
Aim 1: Reducing Vulnerability  
PROLINNOVA Program**

*Report on*  
**4<sup>th</sup> Participatory Innovation Development (PID) Training Workshop Damazin  
06– 10 July 2008**

*Reported by Mukhtar Mohamed Ahmed  
Revised by Noureldin Ahmed Abdalla*



*4<sup>th</sup> (PID) Training Workshop Participants during their field visit to Damazin Industrial Area, listening to an Artisan who is explaining how a water hand bump was innovated and developed*

## **Introduction:**

PROLINNOVA program is an NGO-led initiative to build a global learning network on promoting local innovations in ecologically-oriented agriculture and natural resource management. The focus is on recognizing the dynamics of indigenous knowledge and learning how to strengthen the capacities of family farmers to adjust to changing conditions: to develop and adapt their own site – appropriate systems and institutions of resource management in order to gain food security, sustain their livelihoods and safeguard the environment.

Participatory Innovation Development (PID) is one of the key activities in the Sudan. The challenge of the PID is to arrange for a creative interaction between the knowledge, experiences and the information of villagers with that of scientifically trained researchers, extensionists and academics.

During the period 2006-2007 three PID training workshops were convened in El Obied (18-23/December 2006), Wad Madani (24<sup>th</sup> /February to 1<sup>st</sup>/March 2007 and Kassala (20-24May2007). Workshops were organized in collaboration with the Western Sudan Resources Management Program and Technology Transfer and Extension Administration TTEA (in El Obied), Agricultural Research Corporation (in Wad Madani) and TTEA (in Kassala). Through the last International PROLINNOVA partners Meeting in Ghana (31 March-14 April 2008) it has been agreed to introduce climate change and gender issues into the various PROLINNOVA activities including PID training workshops, this was adopted in this workshop.

The fourth PID Training witnessed an important development in the contents of this series of workshops. Active Participation of young ladies was achieved. Adoption of colloquial Arabic Language availed farmers, pastoralists and artisans to participate actively on the different sessions and activities of the training workshop.

## **2/ Training Purpose:**

Mainstreaming of Participatory Innovation Development (PID) into the activities of the researchers, academicians and development workers.

## **3 / Objectives:**

- Share experience to build on and scale up farmers based research and development (R&D) approach;
- Stimulate interest among researchers and development workers on participatory development for the local ideas and innovations.
- Awareness of the challenges faced by development professionals and scientist in moving local innovations further towards joint experimentation and integrating relevant information and ideas coming from the grassroots.

## **4 / Location and duration:**

The training workshop was conducted in Damazin, capital town of the Blue Nile State. Duration of the Training workshop was 5 days during the period 6-10 July 2008.

## **5 / Collaboration:**

The workshop organized in collaboration with Blue Nile State Technology Transfer and Extension Administration (TTEA).

#### **6/ Participants:**

A total of 25 Participants participated in the training workshop. Women participation is obvious as it compared with previous PID workshops. Out of the total number of the whole participants, women constitute 44% of the total number of participants. See Annex 1.

#### **7/ Coordination:**

Prolinnova partners (TTEA) and Practical Action field office in Damazin.

#### **8/ Facilitators:**

5 facilitators (see annex 1) beside a consultant and the manager of TTEA Damazin, in addition to Prolinnova Coordinators and Practical Action Blue Nile Office Staff, have undertaken the training activities.

#### **9 / The Methodologies adopted:**

Methodologies used in the training workshop were; participatory bottom up approach, power point presentations presented by the facilitators, handouts and sharing of experiences and exchange of knowledge. These methodologies contributed to the personal transformation of participants towards giving value to participatory processes, respect and being agents of learning during PID processes. The workshop was extremely being interactive and participatory. The methods used, behaviors and attitudes of the facilitators mirror the principals of PID, specially, problem-solving methods, small working groups, field practicum, interacting with participants and farmers in the field, games and other experimental learning methods received great emphasis.

#### **10/Proceedings of the Sessions:**

##### **First Day Proceedings:**

##### **Opening Session:**

The Manager of TTEA, Mr. Abdalla Abdalla, welcomed PROLINNOVA Team and Practical Action Damazin and Khartoum Office, participants from different government departments, universities, research stations, farmers and pastoralists unions, and local manufacturers (Artisans). He emphasized the role of the PROLINNOVA program in local innovation development, and poverty reduction. The State of Blue Nile is very rich in human and natural resources, diverse ethnic, cultural norms and traditions. He wished the participants to benefit greatly from facilitators, scientists and researchers, during the whole period of the workshop.

El Tahir Emam, Practical Action Area Coordinator thanked government departments for their collaboration and partnership with Practical Action activities.

Prof. Ibnoaf, Practical Action consultant, stated that, after the country signed the Comprehensive Peace Agreement ( CPA ), we faced by building the peace process, through

alleviation of poverty and even development. Prolinnova program is new in the Sudan, confessed by the notion that, local communities capable of solving their problems and promoting themselves. The World of today is looking backward to our grandfather's local knowledge and innovations. This is due to negative impacts of modern technologies which harm and endangered natural resources, biodiversity and human habitats. As a result the climate change and the Ozone depletion, culminating problems in our today world. PROLINNOVA program is aiming at promoting local innovation by means of participation and partnership methods. He wished for every one of the participants to come up with new ideas, and innovations based on local knowledge. All of them have made life possible for the coming generations. PROLINNOVA Coordinator, welcomed the participants, stated that PID targeting local producers (Farmers, Pastoralists, and Artisans), together with researchers, extensionists, academics and experts) to be addressed and trained on PID methods, promotion of local innovation based on Indigenous Knowledge to alleviate poverty. The Director General of the Ministry of Agriculture, and Animal Wealth, send his thanks and greetings to all participants. He said that, although Practical Action Organization, started development activities not more than one year, it's contributing a lot to development and poverty alleviation in rural areas. Their activities are obvious and unique. We are looking for simple, adaptive and cheap agricultural techniques and tools, to replace complex, expensive less adaptive imported agricultural techniques and tools and spare parts. To mention one example, a Watermelon harvesting tool innovated by a farmer can separate, the seeds, the skin and the flesh of the Watermelon. We are at the ministry of agriculture looking forward to adaptive problem solving innovations, and for those which provide beauty and arts to make life possible and beautiful at rural areas and urban centers.

### **Second Session:**

This session was facilitated by Mahmoud Makki and Ahmed El Hassan Abdul Hakiem. Participants present themselves by mentioning place of birth, place and type of work, qualifications and work experience, common fields of interest and hobbies. Grouping participants into three groups:

- The First group, concerned with providing services to participants.
- The Second group, provide refreshing programs.
- The third group, evaluating the day-to-day work of facilitation, and services provided.

### **Third Session:**

This session was facilitated by Prof. Mirghani Iboaf. Participants raised their expectations. Their expectations are envisaged in the following: Auspices of local innovations in agricultural and industrial sectors. Exchange of experiences, and knowledge between facilitators and trainees. Building capacities, of exploration and observations among the participants. Exploring the hidden and unforeseen innovation. Building capacities of participants to disseminate workshop materials and topics learned. Elimination gaps between participants, facilitators and program team. Consolidating relations between participants. Complementing the work and activities in promoting agricultural innovation, and local manufactured innovations. Use of audiovisual tools and means in learning. Realization of aims and overall objectives of the workshop.

### **Second Day, First Session:**

This session was facilitated by Ahmed Hanafi.

- 1-Participants share participatory approach, knowledge and practices.
- 2-Participants identify strengths and weaknesses.
- 3-Lessons learned.

Lesson learned form this session were:

- a. Building the capacity of Prolinnova partners is essential for more adoption off the PID approach.

- b. The traditional Agricultural extension and research approach is one of the major weaknesses of the research and extension cooperation's and administrations work in Sudan.
- C. The friendly environment, equality and participatory methods adopted by the facilitators enhance the participants understating of the different PID concepts.

**Second Day, Second Session:**

This session was facilitated by Mahmoud Makki and Ahmed El Hassan Abdul Hakiem

Topics presented and discussed were:

- Evolution of PID,
- Key Concepts and Principles of PID,
- Key Steps in PID and
- Main Roles of Actors in PID.

**Third Day, First Session:**

This topic was facilitated by Mahmoud Awad Makki

Topics presented and discussed were:

- Needs Assessment for PID,
- Education Tours and Definitions of Education Tours,
- Visiting others to learn from their trials, experimentations and experiences and
- Looking at problems and solutions in reality.

**Third Day, Second Session:**

This topic was facilitated by Dr. Najeeb Ibrahim

Topics discussed on this session were:

- Participatory Monitoring and Evaluation (PM& E) of PID. Participatory Monitoring and evaluation, differs from the conventional M&E. it is a bottom up method, owned by the community. Focused on project output.
- Understanding project impact and interventions.
- All, round the project cycle Provide timely evaluation and monitoring.

**Third Day, Third Session:**

This topic was facilitated by Dr Najeeb Ibrahim

Topics presented and discussed on this session were:

- Strengthening PID by documentation, institutionalization and scaling up.
- Documentation is a step forward participatory research toward obtaining advanced community based innovation. It means gathering and conservation of data, ideas, and results obtained innovation and trials information's collected, by the available means and ways. The documentation of ideas of farmers and producers, go through chain of persons and institutions.
- Scaling up the idea of PID, through effective participatory actions to influence decision makers, by the following steps of action:
- Campaign: Mobilization of people, and the public through mass media and means of communications.
- Advocacy: Mobilization of a selected segment of persons, elites and educated persons by means of seminars, workshops and conferences.
- Lobbying: Mobilization of pressure groups, such as civil society, political parties, workers Unions, etc.to influence and make pressures on decision makers to respond to their needs and interventions.

#### **Fourth Day: Field Trip:**

Two visiting tours were made to farmers in El Roseries Locality, and a visit to the industrial area in Damazin town.

Lessons Learned from visits to village of Ganis and Telengosh:

1. Families, mainly females cultivate home surrounding arable lands, locally known as, ( Jubraka ). They cultivate family consumed crops and vegetables such as: Local varieties of Sorghum, (Kalakoul) a high yielding variety. Local groundnuts and Legumes (Lubia).
2. Farmers adopted agricultural rotations based on legumes, and cereal crops.
- 3- The problem of weeds and parasite plants is a prominent agricultural problem and need to be solved. Local communities have some innovations and agricultural trials and methods to overcome these problems using two methods (The Diwartta: cutting off grasses before producing seeds, the process repeated two to three times to get rid of the weeds. Sharp knives and swords used for cutting down grasses. Some farmers cultivate sorghum before ploughing; when weeds germinate all of them are going to be weeded. The main crops cultivated thereafter).
- 4- The second main problem, the existence of many pests and diseases, at harvesting and storing periods. Farmers use many methods to eradicate pests in the field they are mainly (Hot peppers used to kill insects and pests, use of Delis fuel, a pollutant petroleum substance or Use of garad, Neem seeds and branches to repel insects, ants outside grain stores.

All facilitators contributed to the field visit activities.



*Participants trying a weeding tool (Malouda) during filed visit in Telengosh village-rural El Rosaries Township*



*Engassana Woman sowing Sorghum in home surrounding Arable Land (Jubraca) in Telengosh village-rural El Rosaries Township*

#### **Fifth Day, First Session:**

This topic was facilitated by Dr Abdalla Ibrahim El Hajwa.

Topic discussed on this session was Organic Agriculture. Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.

Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved.

The Start up of the organic Agriculture:

The fundamentals of organic agriculture (health, ecology, care and fairness) has been adopted in Adelaide, Australia in September, 2005.

Sudan Potentialities and Organic agriculture: Abundant Natural resources, Biodiversity, Availability of Arable fertile unused agricultural lands, Fresh water for irrigation from different sources, less use of manufactured fertilizers, Availability of Organic materials from livestock and plants. Future of Organic Agriculture in Sudan is very promising, need to be addressed to decision and policy makers. Scaling up the use of the organic agriculture through the following participatory actions: Compagn, Advocacy, lobbying.

#### **Fifth Day, Second Session:**

This session was facilitated by Mahmoud Awad Makki

Participants evaluated the workshop according to the following criteria:

- Auspices of local innovations in agricultural and industrial sectors.
- Exchange of experiences, and knowledge between the facilitators and trainees.

- Building capacities, of exploration and observations among the participants.
- Exploration the hidden and unforeseen innovations.
- Building capacities of participants to disseminate workshop materials and topics learned.
- Elimination of gaps between participants, facilitators and program team.
- Consolidating relations between all participants.
- Complementing the work and activities in promoting agricultural innovations, and local manufactured innovations.
- Use of audiovisual tools and means in learning.
- Realization of aims and overall objectives of the workshop.

The workshop realized most of the expectations of participants:

#### **Fifth Day, Last Session:**

1. Graduation Ceremony, and Distribution of Certificates to Participants.
2. Closure of the workshop.

#### **Other Activities:**

Blue Nile state TV Channel and Radio Station covered the workshop activities in their broadcasting services.

Prolinnova Sudan programme coordinator and Mr. Hanafi (training workshop facilitator) held a meeting with deputy director of the Community Development Fund project in Blue Nile. The two sides agreed to conduct in collaborative manner certain activities which satisfied their interest during 2009.

#### **Key Outputs:**

- 25 local partners trained on IK and PID with concern with climate change issues.
- Local organizations such as the organization of bio-agriculture, farmers and Pastoralists Unions and artisans were involved and trained on how to collect and identify innovations.
- Establishment of the Blue Nile Forum on PID.
- Manual of the training contents given to participants for their future use.
- Training report including recommendations for future actions.
- Action plan for what is next.

#### **Action Plan for PID Activities in Blue Nile:**

All participants were divided into couple groups, every group create and present a plan for future PID activities and how the knowledge gained from the training will be used, a common action plan was agreed upon that is:

- 1- Identify, test and document at least 3 local innovation by the end of 2008.
- 2- Abdalla Abdalla the director of (TTEA) in Blue Nile was nominated as a focal point to coordinate and assist formulating at least one PID case study in the state level.
- 3- More attention will be given for women innovation/innovators.
- 4- Ahmed Mohammed Ahmed a researcher from Abu Nyama Research Station will adopt the participatory approach to conduct his MSc research, Dr. Nageeb agreed to support him with continuous supervision.

#### **Lesson learned:**

- Use of Arabic language during the workshop enhanced the participant understanding of the PID concepts and principals.
- Involvement of farmers, pastoralist and Artisans ensure their key roles in PID activities.
- Due to active participation of Blue Nile State Women (from different disciplines) in the Training workshop some of the State women innovation was identified.

## Annex 1.

### List of Participants:

No	Name	Place of work	Gender	Telephone
1	Sanna El Sadig Abd El Rahman	Community development Fund	Female	0915219496
2	Nahid Ahmed El Yaas	Dep. Of Plant Protection	Female	0122381596
3	Widad El Amin Yousif	TTEA	Female	0122438169
4	Gasim Ahmed Gumaa El Nayir	CDF	Male	0122204898/0917163772
5	Yahia Gorashi	Iron Smith, Industrial Area	Male	0913917330
6	Hassan Badawi Jubarah	Iron Smith, Industrial Area	Male	0121561979
7	Mohammed Hamad Mohammed	Iron Smith, Industrial Area	Male	0914247089
8	Asha Abass Babiker A.Alla	Rural Women Development, unit	Female	0918197204
9	Abu Bakr Ahmed Shukr Alla	Damazin Research Station	Male	0912833558
10	Amani Ibrahim Ahmed Taha	Dep. Of Forestry	Female	0914114102
11	Amar Fadul Allah Gism Allah	Damazin Research Station	Male	0122466086
12	Mohammed A.Rahim Moh. Khatib	Technician Damazin, Research Station	Male	0122996332
13	Jamal Ali Adam Jamossi	Sennar Research Station	Male	0121707323
14	Ibrahim Moh. El Mardi	Ministry Of Agriculture	Male	0129051069
15	Manal Adam El Tayib	Dep.of Horticulture	Female	0914254922
16	Khalid El Awad Moh. Dafa Alla	Sennar University	Male	0911259687
17	Hawa Abkr Eissa	Organic Agr. Wad Medani	Female	0915890657
18	Saad Mohammed Adam, Babikir	TTEA	Female	0912641556
19	Hassan Zaki Kadafoura	Traditional Farmer	Male	-----
20	Gisma Ali Hamzah	Department of Forestry	Female	0918053036
21	Arafa Ibrahim Adam Abd El Aziz	Ministry of Animal Wealth	Female	0129015514
22	El Tayib Salah El Deen	Ministry of Agriculture	Male	0122856441

23	Ahmed Mohammed Ahmed El Haj	Abu Nyama Research Station	Male	0122075195
24	Nuseiba Jebr Alla Suliman	Ministry of Agriculture Planning Unit	Female	0122360728
25	Ahmed Mohamed Abakora	Ministry of Agriculture	Male	09150039543
26	Mahmoud Awad Makki	Facilitator	Male	0122244894
27	Abdul Hakeem Ahmed El Hassan	Facilitator	Male	0912674877
28	Ahmed Hanafi	Facilitator	Male	0912161978
29	Mirghani Ibnoaf	Consultant	Male	0912390196
30	Nageeb Ibrahim	Facilitator	Male	0918067525
31	Ibrahim Abdalla Elhajwa	Facilitator	Male	0923496776
32	Noureldin Ahmed Abdalla	Prolinnova-Sudan Coordinator	Male	0121329559
33	Mukhtar Mohamed Ahmed	Practical Action Staff	Male	0911274956