



**Characterising a local innovation:
Fighting seasonal hunger in the village of Pout Dagné, in the
district and rural community of Notto in Thiès Region**

The innovation is characterised by



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Table of contents

INTRODUCTION	2
I. CONTEXT OF INNOVATION	3
1.1. Introducing the area	3
1.2. Physical, demographic, economical and social aspects.....	3
1.2.1. Physical aspects	3
1.2.2. Demographic aspects	4
1.2.3. Economic aspects	5
1.2.4. Social aspects.....	5
1.3. Main challenges and constraints.....	6
1.3.1 At physical level	6
1.3.2. Activities in support of the economy	Error! Bookmark not defined.
II. CHARACTERISING THE INNOVATION	6
2.1. Describing the innovation.....	6
2.2. Nature of innovation and its starting date	7
2.3. Trigger and origin of idea.....	8
2.4 Community motivation	8
2.5. Innovation process.....	8
2.6. Means needed	8
2.7. Links with external bodies	8
III. CURRENT STATE OF INNOVATION AND CONSTRAINTS	9
CONCLUSION.....	9

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INTRODUCTION

During the training workshop on Participatory Innovation Development (PID) held in Thiès on 12–13 March, the PID approach was presented through its various stages, tools and experiences to attending institutions including GREEN SENEGAL, FONGS, ENSA, HWA Senegal, Dynamique-Femme-Joal; ANCAR, and AGRECOL Afrique.

The workshop was an opportunity for training the participants in the PID approach. At the end of the workshop, the attending institutions set up a plan for characterising farmers' innovations. As far as AGRECOL Afrique and HWA Senegal are concerned, they were devoted to characterising a local innovation. The topic was about coping with hunger in the village of Pout Dagné.

I. INNOVATION CONTEXT

1.1. Introducing the area

Pout Dagné (in the region of Thiès, district and rural community of Notto) is a hamlet near the village of Pout Diack, which is situated to the north. The hamlet is situated east of Pout Ndoff, West of Keur Birane and north of Ndoiyene.

Pout Dagné covers a surface of 5km² occupied as follows:

Land	Surface (ha)
Inhabited area	2.5
Uncultivated area	60
Cultivated	437.5
Total	500

1.2. Physical, demographic, economic and social aspects

1.2.1. Physical aspects

In the western side of the district, there is a line of plateau dominating huge areas of flat lands to the east and centre. This topographic configuration, along with prevailing so-called dominant winds, is conducive to various types of wind and water erosion.

m2



Gullies due to water erosion

The Sahelian climate is defined by the predominance of two air masses (Alize and Monsoon) which alternately bring a dry and a rainy season. The latter is reputed for an irregular rainfall which varies considerably according to year. Presently, the annual rainfall in the district is about 500 mm.

The local vegetation is of two major types: there is, on the one hand, a discontinued herbaceous floor and, on the other hand, various bush and arborescent types of species.

Local pedology is defined by three soil types:

- Tropical ferruginous and sandy soils so-called “Dior”: they are severely degraded, with little organic matter and poor capacity for water retention; they are suitable for rainfed farming.
- Ferruginous and sandy soils with some proportion of clay and humus so-called ‘Deck-dior’: they have a fairly good capacity for water retention and are suitable for rainfed and out of season farming.
- Highly fertile hydromorphic soils so-called ‘deck’: they are rich in organic matter and are suitable for gardening.

1.2.2. Demographic aspects

- Population

Pout Dagné has a population of 484 inhabitants on a surface of 5 km², which means a medium density of about 97 inhabitants per km².

- **Migration**

The village is suffers from migration. In addition to permanent migration concerning people working as civil servants, there is considerable migration due to lack of activities after the farming season. So, women are constantly commuting between the village and Thiès, where they work as maids, while the youths wander around various towns trying to find jobs as seasonal workers.

Below are the numbers of migrants, representing 15.5% of the total population.

- Permanent migrants: 7
- Seasonal migrants: 33
- Maids: 35

1.2.3. Economic aspects

The rural economy is mainly based on rainfed farming. We are essentially talking about food crops, basically cereals, and cash crops, mainly peanuts. Climatic hardships, along with land degradation due to both erosion and bad cultural practices, strongly impede the growth of agriculture and endanger food security; they also hinder the improvement and diversification of farmers' income, households' food security as well as seeds stockpiling.

Development partners such as ANCAR, AGRECOL Afrique, HWA Senegal and Plan International are currently trying to find solutions to economic hardships through various actions which aim, among other objectives, at:

- Economic valorisation of the land through sustainable exploitation and marketing of agricultural and forestry products;
- Sustainable management of the land through water and soil conservation;
- Promotion of community innovation; and
- Building technical, financial and organisational capacities.

Harmonising activities around the above-mentioned objectives is the challenge to meet if one wants to face the constraints that are presently slowing down the development of Pout Dagné.

1.2.4. Social aspects

- **Literacy - Education**

- Literacy rate in French: 115 persons, representing about 24% of the population;
- Literacy rate in Arabic: 37 persons, or about 7% of the population;
- Literacy rate in Serer: 35 persons, or about 7% of the population.

- **Opinion leaders**
 - Head of village;
 - Imam;
 - Community leaders such as the elders; and
 - Chairpersons of various organisations in the village.

- **Village projects**

The population, especially women, are trying to get active in dry-season gardening. Some initiatives had been undertaken but not very successfully due to lack of water.

1.3. Main challenges and constraints

1.3.1 At physical level

- Gradual degradation of ground vegetation and loss of local animal species due to land overuse and poor management of natural resources;
- Climatic irregularity;
- Degradation of farming land and strong land pressure leading to gradual shrinking of cultivated land; and
- Lack of water for drinking, watering plants and for the livestock.

1.3.2 Activities in support of the economy

- Low level of farming equipment;
- High rate of poverty among the majority of producers.

II. CHARACTERISING THE INNOVATION

2.1. Description of the innovation

The innovation identified at Pout Dagné is relating to the fight against seasonal hunger (recurrent food insecurity) through setting up a sound form of management of millet fields and harvests.



Millet field



Millet stacks waiting for shredding

2.2. Nature of innovation and its starting date

Millet is the main staple food in the Serere village of Pout Dagné. Its sound management may help fight seasonal hunger that is in its highest during the rainy season. In this respect, the populations agreed, after a series of consultations and attempts, to conduct a system which consists in a collective exploitation of a farm whose produce will be secured until the date, again, collectively set for its consumption.

Every head of household is allotted two millet fields, plus a peanut field, and for some of them, a gardening plot. In addition, at village level, there is a collective farm. Everyone accepts the obligation to serve on the farm twice a week until harvest. After threshing, a manager is appointed as responsible for keeping the stored millet until the start of the rainy season. Until then, no one is allowed to use the collective millet. Households in situation of deficit may resort to donations from parents or in-kind loans.

As of July, the millet processed as couscous may be used for collective breakfast and lunch during the whole period of seasonal hunger.



Millet stockpiling after threshing



Couscous making for a collective meal

This organisation regarding millet consumption dates back to 1971.

2.3 Trigger and origin of idea

After several attempts at individual level to solve the problem, the local people realised that only an action collectively elaborated and conducted could successfully face the issue of seasonal hunger.

2.4 Community motivation

The main concern in the community was to find a truly alternative strategy to gradually fight hunger in the rainy season, which is also a period where everyone is busy with farm work.

2.5. Innovation process

The innovation stemmed from a series of reflections. It all originated from hardships that the village has been going through since 1958. To face the problems, the local people came up with all sorts of strategies. The most common one was reducing the number of meals. So, millet was eaten only for breakfast and lunch or supper. Gradually, new ideas started to emerge. Then, there came about an option that would help to meet the need for food during times of seasonal hunger. Some thought the best alternative was to experiment with a collective farm and fix rules for managing and sharing the harvest. The success was immediate and the system is still sustained in the village.

2.6. Means needed

The means needed for the success of this innovative strategy to cope with seasonal hunger are as follows:

- The will to serve the interests of the village;
- Farming land;
- Available seeds;
- Farming equipment; and
- Strict observation of rules of management and sharing of the harvest.

2.7. Links with external bodies

Recently, NGOs such as Agrecol Afrique, through PROFEIS, are active in the promotion of local innovation. The links with this and other NGOs and projects, such as HWA Senegal, create many opportunities for the village to build its capacities in the field. ANCAR's support will help, through a participatory plan of action, to ensure a close monitoring of the planned actions.

III. STATE OF INNOVATION AND CONSTRAINTS

The innovation is still functional and is used only for meeting food needs. So, the excess products are kept for use the next year. This system is often presented during informal and official meetings with development partners. However, no replication of such a system in the area or elsewhere has been reported so far.

Unfortunately, over the years, land scarcity and land-related conflicts between heirs have reduced the importance of the collective farms. Only two big families in the village are still using this type of organisation.

CONCLUSION

The experience of Pout Dagné shows the spirit of innovation present in our villages when they are faced with daily hardships. This means that people in the villages are full of original ideas. That is why it is important to reinforce the work of identifying and characterising all actions that have some innovating and thus added value.