

## Brief report on the "Happy Strategies Game"

## International Water Forum 3 in Pretoria, South Africa

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#### The "Happy Strategies" game

#### International Water Forum 3, November 15<sup>th</sup> Pretoria, South Africa

### 1 Objective

The objective of this game is to identify a selection of practical strategies of Land and Water Management which could be applicable at a landscape level.

The game is a simple representation of current and future land practice options which could be implemented at a catchment scale. The game relies on players interacting to decide a best set of practices that together will form a strategy for that particular landscape. There is no absolute winner! This is very much work in progress.

The first trial of the game took place at NBDC Stakeholder Forum and Project Meeting hold in Bahir Dar in October 2011. The participants explored a 'happy strategies' game devised to help the Nile 3 project mix and match promising practices with the needs of specific watersheds/landscapes of the Project sites (Jeldu, Diga and Fogera) in mind.

For this second run, that took place at the International Water Forum in South Africa, the rules have been slightly adjusted for being played by water scientist who do not have local knowledge about the Nile and rainwater management.

### 2 The game

#### 2.1 The different parts of the game

*Practice card* (34): present rainwater management practice with purpose and suitability conditions.

*Innovation card:* blank practice cards on which participants can describe practices that are not yet in the game.

*Intervention cards :* blank card describe interventions that would support/enable the implementation of the strategy, such as micro-credit.

Landscape poster : describes the site-specific characteristics of a watershed

*The help desk*: a committee of 2 knowledgeable people that lead the game that can advise participants and have the right to change or trade practice cards.



Landscape manager: a facilitator for each group that keeps track of the process.

#### 2.2 Rules

First a conceptual landscape is presented as well as the concepts of practice (farmer's decision making to do something on his farm), intervention (farmer cannot directly influence, NGO, policy, education, market creation...) and strategy.

Jegerida is a fictive name of the FAO (6<sup>th</sup> level) watershed, in which the NBDC Jeldu site is located. The watershed site is used as "landscapes" for which the strategy should be developed. The game was played with scientists present at the water forum. Because these persons do not know the study site, an extensive presentation of the challenges in Jeldu was presented. Also soil, rainfall, infrastructure, elevation and slope were mapped and major socio-economic indicators were presented on a poster.

Then participants were assigned to a "landscape" table where a "landscape manager" facilitates the discussions. Each table received a random set of 10 practices cards.

In a first round participants are asked to look at their card, if they disagree with the content they correct the card.

In a second round all participants will try to define a strategy, by trying to locate practices along the slope of the landscape and form synergies. The resulting strategy should:

- Consist of practices that match the landscape (i.e. the suitability conditions are met)
- Have practices in all sections of the landscape
- Have an overall positive impact on the landscape (in terms of productivity, livelihoods, sustainability, ...)

In order to form a coherent strategy, cards can be exchanged at the help desk:

- a card can be exchanged with or donated to other landscapes
- Practice card can be exchanged into a new one at the help desk if at least two other landscape have refused to exchange the card
- Upon demand innovation cards and intervention cards can be filled at the help desk

The help desk keeps track of the exchanges and helps to fill out the innovation and intervention cards.



## **3** Developed strategies

#### 3.1 Group 1

UPLAND : hillside terraces, orchards (market access, know-how), woodlots

MIDLAND : bunds (community organization), grass strip, crop-based fertility management (know-how), limit animal movement and improve livestock breeds.

LOWLAND : micro dam and ponds

#### Discussion :

In the upland, fruit productions can only be implemented if markets are developed and if sufficient technical knowledge.

In the midland the objectives are : reduce erosion, increase fertility, increase yields , increase market access, increase water for the dry season, decrease deforestation, increase crop-livestock integration, pooling resources and risk spreading.

In this perspective, in the midlands, bund should be combined with soil fertility interventions, conservation tillage, legumes, and manure management. In addition bunds nee community organization as well as technical know-how)

For the low land frees can be planted to deal with flooding, and micro-dams can be combined with pumps.

In terms of interventions at landscape scale the group suggests:

- Farmer organization (cooperative)
- Link farmers to market
- Training
- Participatory approaches
- Build on existing structures
- Group-based economic incentives
- Smallholder groups credit/saving association
- NGO's involvement



#### 3.2 Group 2

#### Strategy :

UPLAND : fruit trees, limiting animal movement, apicultures

MIDLAND, crop-based fertility, improved soil nutrient input, hillside terraces, improved livestock breeds, cut-off drains, ponds

LOWLAND : micro dam, area exclosure

fishing, pasture, eco-tourism, rice, recession agriculture

innovation : recession agriculture

intervention : build an airport

Initial cards that have been exchanged:

Initial card	Reason for exchange	New card	
Crop-based fertility management	Was double	Hillside terraces	
Conservation tillage	Too much livestock	Limiting animal movement	
Diversion		Micro dam	

#### Discussion

The discussion started with the objective: is the objectives resource management or addressing poverty? Who are we? (Farmers, innovation platform, external agency)

Problems in the landscape are drainage, erosion and deforestation and the drivers are low productivity, high poverty, poor access to market, small land size, high population.

In order to reduce poverty, agricultural productivity should increase and erosion decrease, this combined with alternatives livelihoods and access to market.

The need is a strategy that doesn't need much collective action initially and has fast returns. It need to be able to sequences of intervention not only location. The private sector needs to be included in innovation platform.



# 4 Lesson learnt

#### 4.1 From developed strategies

The developed strategy, fit pretty well the concept developed based on the last round of the happy strategy game and the various stakeholder workshops, shown below. At landscape scale, a strategy consist of a combination of practices that increase infiltration in the upland, increase soil and water conservation in the midland and increases water access and efficient use in the lowlands.

	Cropland	Grassing land	Degraded land
Upland	Increase infiltration	Increase fodder quantity and quality	Rehabilitated degraded land
Midland	Increase soil and water conservation	quantity and quanty	
Lowland	Increase water access and efficient use		

This second version of the game, contained many more practices directly related to livestock and grassland as well as practices related to fertility management. The discussion among scientist made clear that not only the landscape scale in important but also the farm scale. At farm scale practices need to be combined taking the inter linkages between the mixed crop-livestock system, combining the livestock practices with the suitable fertility management practices and crop related practices.

#### 4.2 From the game itself

In this format, the game becomes much more a discussion tool that really an interactive games. In this version, innovation and intervention cards have been hardly used, whereas the discussions clearly discussed these issues. Nonetheless, this version seems to work well with people that do not know the sites or the different rainwater management practices.

### 5 Conclusion

The happy strategy game is a great tool that allows participants to engage easily in a discussion on complex issues that aim at optimizing multi-objective and multi-input problems.



In addition, this exercise has shown that the objectives behind the strategies are relatively similar and can be used to define strategies at landscape scale. Finally, linkages from the mixed crop-livestock system should not be ignored, and therefore a strategy at landscape scale is the result of an optimization at two different scale : the farm and the landscape.

