
Product Chain Action Plan tomato production in Kenya and Tanzania

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AfriVeg



Report 3

The AfriVeg Programme Management

If you think you could contribute to the goals of AfriVeg in any way, please contact the Programme management.

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1. Introduction

Field vegetable production chains can contribute to rural livelihood and development on the basis of its high added value, the considerable labour demand and the high nutritional value that the products represent. Considering these effects, the further development of the field vegetable production sector can contribute significantly to the MDG's. From several sector studies in the region it is concluded that various constraints restrict the development of the sector, such as as:

- Quality Issues (poor handling and inappropriate varieties);
- Good quality seed and varieties adapted to African conditions
- Seasonality & Prices (High fluctuation in supply between the dry and rainy seasons resulting in high price fluctuations; lack of some commodities; artificial supply and price distortions caused by brokers)
- Purchasing power, Sales and Profits (Low purchasing power in domestic market and low returns due to high competition:
- Traditional Vegetables (Lack of indigenous vegetables while demand increases)
- Transport Issues (High cost of transport due to poor road conditions and associated spoilage of produce)
- Capital (Lack of capital among the small farmers and traders);
- Markets/ Market Facilities (High congestion, unhygienic conditions, and insecurity at main market centers);



Figure 1. Tomato transport boxes

- Standards, Food Safety & Traceability (Poor and unstandardized packaging of produce delivered to wholesale markets);
- Marketing Organizations (Lack of Marketing Organizations and Information)
- Processing (Lack of sufficient processing capacity);
- Awareness (Lack of awareness on the nutritional value)

With the importance of the field vegetable sector for Africa in mind and the constraints attached to that sector, the AfriVeg project ("Development of

commercial field vegetable production, distribution and marketing for the East African market") was developed by Wageningen UR to contribute to actions that could take the field vegetable sector in Tanzania and Kenya to the next level. It was decided to do this by working on concrete pilots in close collaboration with stakeholders. Based on two studies (AfriVeg reports 1 and 2) in Tanzania and Kenya, it was decided to focus on the tomato supply chain in both countries. With this decision as a starting point, a workshop was organized in Tanzania to develop the pilots on more detailed level.

2. Workshop

On June 21 the workshop was held in Arusha, Tanzania, with stakeholders of tomato chains in both Tanzania and Kenya. This workshop was organised by Wageningen UR in the framework of the project AfrVeg. The workshop was preceded by an exploration (visit, interviews) by WUR-staff of the tomato chain (production, distribution) in the Arusha area. The workshop was attended by the participants in Table 1:

The workshop resulted in two pilots:

- A. A pilot directed at linking smallholder tomato growers to high segment markets.
- B. A pilot directed at improving the current cross border tomato chain from Tanzania to Mombasa, Kenya.

Table 1. Workshop participants

Kenya Horticultural Development Programme (KHDP) of USAID:
Arumeru DALO (Agriculture and Livestock Department):
Tanzania Horticulture Association (TAHA):
Tegemeo Institute:
Kenyan Ministry of Agriculture Horticulture Department
Tomato trader in Arusha and trading to Mombasa
Tomato farmers in Aumeru District:
Multiflower extension staff
Wageningen University & Research - PPO:
Wageningen University & Research – LEI:



An effective execution of the activities needs a local coordination. It was decided that KHDP will act as the coordinator for the Kenyan side while TAHA will do the same at the Tanzanian side for pilot A and Multiflower extension staff for pilot B. They are supported by a counterpart from Wageningen UR (WUR-LEI for pilot A and WUR-PPO for pilot B).

Figure 2. Workshop participants.

To reach full result and benefit from the pilots, activities are needed in 2007 and in 2008.

Both pilots were elaborated into details allowing a project execution according to plan.

3. Pilot to improve linkage of domestic tomato supply chains to local high segment markets.

Goal of pilot

The pilot aims to link smallholder tomato farmers in both Kenya and Tanzania to high segment markets as supermarkets, hotels, restaurants and hospitals.

Objective

1. To analyse requirements, demand and institutional setting of the high segment market;
2. To organise tomato farmer groups who have the ambition and potential to meet the requirements of the high segment market;
3. To support farmer groups producing the required tomatoes for the high market segment;
4. To provide high quality tomatoes to consumers.

Outputs

1. An overview of the size, requirements, institutional setting and current supply issues of tomatoes to the Uchumi market in Nairobi and to the hotels and restaurants in Arusha;
2. Farmer groups identified around Arusha and Nairobi who will participate in activities enabling them to deliver their produce to the high market segment.
3. An overview of the current production yields and related management techniques including post harvest and trading aspects of the identified farmer groups.
4. Confrontation of output 1 with output 3 and subsequent identification of bottle-necks as a basis for development of an appropriate training..
5. Farmers training focussed on identified bottle-necks.

Activities 2007

1. Assess the needs of the Uchumi supermarket in Nairobi and the hotels and restaurants in Arusha
 - a. A limited literature review
 - b. Designing an interview format to support a small survey
 - c. Conducting survey interviews with contacted institutes to estimate
 - Demand for tomatoes
 - Quality requirements
 - Possible arrangements with the farmers;
2. Identify institutes to participate in the pilot (in Tanzania);
3. Identify farmer groups (consisting of men and women) by linking to on-going activities with existing farmer groups; in Kenya through KHDP/USAID and in Tanzania through Arumeru DALO;
4. Establish linkages between the farmer groups and identified institutions that defines the type of arrangements based on their willingness to supply (farmers) and buy (traders) tomatoes, demand, quality standards and trade aspects as well;
5. Assess current production management techniques including post harvest and trading aspects;
6. Identify training needs based on the gap between requirements of the market (institutes) and the current farming situation and develop training;

Activities 2008

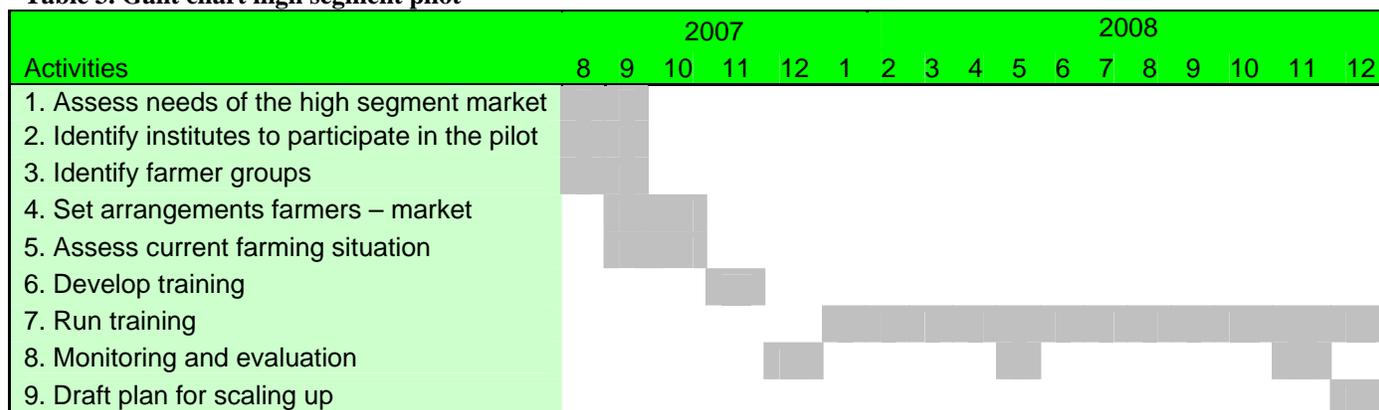
7. Running training program on required issues as GAP, post harvest handling and transportation
 - a. Use of demonstration plot
 - b. Study tour to the end market (institutions) and to another farmer group which is already linked to the high segment market;
8. Monitoring and evaluation of the pilot two times a year;

9. Draft plan for scaling up, including reporting.

Table 2. Action plan high segment pilot.

Activity	Partners - Tanzania	Partners - Kenya
1. Assess needs of the high segment market a) literature research b) design survey c) interviews	a) Tegemeo b) WUR-LEI, Arumeru DALO c) Arumeru DALO, TAHA	a) Tegemeo & KHDP b) WUR-LEI & KHDP c) KHDP
2. Identify institutes to participate in the pilot	WUR-LEI & TAHA	WUR-LEI & KHDP
3. Identify farmer groups a) identify list of required basic data of farmers b) organise farmer groups & gather basic farm data	a) WUR-PPO b) Arumeru DALO	a) WUR-PPO b) KHDP
4. Set arrangements farmers – market a) preliminary discussions and setting agenda b) meeting with all stakeholders to finalise arrangements	a) Arumeru DALO & TAHA b) WUR-PPO, WUR-LEI, Arumeru DALO, TAHA & hotel/restaurant managers	a) Ben (KHDP) b) WUR-PPO, WUR-LEI, KHDP & Uchumi manager
5. Assess current pre- and post harvest situation (immediately after the meeting)	Arumeru DALO, TAHA, WUR-PPO & WUR-LEI	KHDP, WUR-PPO & WUR-LEI
6. Develop training	WUR-PPO & WUR-LEI	WUR-PPO & WUR-LEI
7. Run training a) demonstration plot b) study tour end market & other farmer groups	a) Arumeru DALO, TAHA & WUR-PPO b) TAHA & WUR-LEI	a) KHDP & WUR-PPO b) KHDP & WUR-LEI
8. Monitoring and evaluation	WUR-LEI, WUR-PPO & Tegemeo	WUR-LEI, WUR-PPO & Tegemeo
9. Draft plan for scaling up	WUR-PPO & WUR-LEI	WUR-PPO & WUR-LEI

Table 3. Gant chart high segment pilot



Assumptions

Success of the pilot depends on the collaboration between the partners and whether there will be institutes interested to be partners in this pilot.

4. Pilot to improve the Tanzania-Mombasa cross-border tomato product chains

Goal of pilot

The goal of the pilot activities is to improve cross-border tomato chains from Ngarenanyuki, Tanzania, to Mombasa, Kenya, by increasing substantially (10%) the productivity (physical and financial yield per unit input), the product quality and the total market volume.

Objective

1. To identify farmer groups in Ngarenanyuki that are currently linked to the Mombasa tomato markets.
2. To increase awareness with these groups of Mombasa market demands.
3. To identify bottle-necks within the existing chains
4. To train product chain participants on improvement of bottle necks.

Output

1. Assessment of the requirements, institutional setting and current supply issues of the Mombasa tomato market and the supply chain logistics and characteristics.
2. Farmer groups identified.
3. Bottle-necks and potential improvements on production level identified.
4. Confrontation of output 1 with output 3 and subsequent identification of bottle-necks as a basis for development of an appropriate training.
5. Farmers training focussed on identified bottle-necks.
6. Field demonstration directed at lifting bottle-necks.
7. Overall project report with policy recommendations and scaling up.



Figure 3. Tomato production field in Tanzania

Activities 2007

1. Mombasa market structure:
 - Collection of available data and information.
 - Identifying missing information.
 - Collect missing information.
2. Formation of 3 groups of minimal 10 farmers each (3 villages) and assessment of current production situation
3. Assessment of logistics of tomatoes from farm to Mombasa:
 - Packing and stacking.
 - Lorries transport and infrastructure situation
 - Timing of production and product quality.
 - Temperature during transport and damage occurring.
4. Identify bottle necks and define potential improvements:
 - Discussing results of output 2 with output 3 with identified farmer groups.
 - Concluding on improvements needed (business skills, market information, management techniques).
 - Training needs assessment.
5. Develop training concept

Activities 2008

6. Training of farmer groups.
7. Field record keeping for the purpose of management evaluation
8. Study tours:
 - a) 3 farm leaders visiting the market in Mombasa and to Kenyan tomato farmers.
 - b) Video / power point to be presented at producers groups to attain a better understanding of their market.
9. Meetings with all stakeholders in the chain by the group leaders to stimulate chain transparency.
10. Establishment of lobby group addressing rehabilitation of irrigation infrastructure, roads and border commissions and levies; Government subsidies.
11. Setting up field demonstrations directed at the identified improvements.
12. Monitoring and evaluation of the pilot two times a year;
13. Draft plan for scaling up, including reporting.



Figure 4. Tomatoes on the Arusha market



Figure 5. Tomato transplant

Table 4. Action plan cross border pilot

Activity	Responsible partner
1. Mombasa market structure	Tegemeo, WUR-LEI & WUR-PPO
2. Formation producer groups	Multiflower & WUR-PPO
3. Tomato logistics assessment TZ-Mombasa	Multiflower, WUR-PPO & WUR-LEI
4. Identification of bottle necks and improvements	Multiflower, WUR-PPO & WUR-LEI
5. Develop training concept	WUR-PPO & WUR-LEI
6. Training of farmer groups	WUR-PPO, WUR-LEI & Multiflower
7. Field record keeping	Arumeru DALO & Multiflower
8. Study tour Kenya	TAHA, WUR-PPO, WUR-LEI, farmers, traders
9. Stakeholder meeting	WUR-PPO, WUR-LEI, Multiflower & TAHA
10. Formation of a lobby group of producers/traders	TAHA, farmers, traders
11. Field demonstrations	WUR-PPO, WUR-LEI, Multiflower, TAHA, farmers, traders, Arumeru DALO
12. Monitoring and evaluation of the pilot two times a year;	WUR-PPO, WUR-LEI & Tegemeo
13. Draft plan for scaling up, including reporting.	WUR-PPO, WUR-LEI, TAGHA & Arumeru DALO

Table 5. Gant chart cross border pilot

Activities	2007					2008											
	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1. Mombasa market structure																	
2. Formation producer groups																	
3. Tomato logistics assessment TZ-Mombasa																	
4. Identification of bottle necks and improvements																	
5. Develop concept for training																	
6. Training of farmer groups																	
7. Field record keeping																	
8. Study tour Kenya																	
9. Stakeholder meeting																	
10. Formation of a lobby group of producers/traders																	
11. Field demonstrations																	
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13. Draft plan for scaling up, including reporting																	