



AGRICULTURE PROJECTS

THE IMPROVED PRODUCTION OF FOOD, SPICES & JATROPHA-FOR-BIO-ENERGY

OVERVIEW & LIST OF THE INTERRELATED PROJECTS OF ACTION PROGRAMME 1

Update: 15 March 2012

The contents of a selection of important plans, project descriptions and progress reports can be consulted on the **DOWNLOADS** section of our website www.tomoka-togo.com

This document is one of them

1 SUMMARY OF ALL PROGRAMS

By necessity, this summarizing, descriptive overview of **interrelated projects** often refers to Projects which are listed in the other four Action Programmes. Together, they form a comprehensive cluster of interventions which will realize Tomoka's Main Objective: organising, supporting and facilitating the extremely poor, multi-ethnic population of the Target Area in such a way that sustainable rural social-economic developments will result in more well-being and prosperity for all.

All development activities are being conceived, planned and implemented in the form of Projects within **five interdependent Action Programmes**. Each project and each program has links to the others. They mutually impact on each other.

Agriculture (Program 1) lies at the basis of our development method – a method which aims at the production of staple crops and other food stuffs in conjunction with *Jatropha Curcas* which delivers oil for bio-energy for cooking, light, and diesel engines in trucks, industries and generators for rural electrification. All *Jatropha* harvests and a large share of the food crops will be processed in local, small scale **Agro-industries** (Program 3) which create important economic surplus values and higher levels of entrepreneurial activities within the Target Area itself. All this will only be possible if we are able to stop the ongoing degradation and deforestation of our Canton's natural environment. That is why Tomoka has conceived some **Environment Protection and Rehabilitation** Projects (Program 2). And the remaining two programmes are even more important for a sustainable development because they deal with the people themselves: the **Social** Projects of Program 4 aim at community development and the creation & improvement of social infrastructures like health care, education, safe drinking water, sanitation and things like finance, telecommunication and rural roads. And last but not least: Program 5 aims at the creation and reinforcement of the **Local Organisations** which will unite the members of the Target Group in order to realize the concrete development projects within the four previous programmes. A strong non-profit organisation like Tomoka will translate itself in a fair and profitable representation and cooperation between the local Chieftaincy, the multi-ethnic Farmers, Women Groups, and GuKam (Tomoka's initiator and important economic motor within this development project).

The above **hybrid form of the well-known *Jatropha* System** is explained into more detail in the section <Our Project> of our website.

2 OVERVIEW OF ACTION PROGRAM 1: AGRICULTURE

Tomoka aims at the introduction of **better agronomic methods and practices** in order to increase the total production surface with at least 1000 hectares of unused, deforested land. An agronomist (Project 502) will manage this Program. By organising the autochthon and immigrant farmers (Project 805) and providing them with more and better land (Project 505) the Agricultural Program will contribute significantly to the success of this project. Such a farm extension is only possible when the heaviest agronomic practices are supported by appropriate Machines and Tools like tractors, ploughs, carts, wheelbarrows, brush cutters, a truck.... and hand tools which will elevate our subsistence farmers to a commercial level. Project 507 will provide the services of machines and other implements for a better agricultural performance. The Machine & Tool Pool (MTP) concerned will function as an independent, economic sustainable unit, managed by Tomoka's Project Bureau.

The Agriculture Program also contributes significantly to the **improvement of the health of the population**. Gardening Projects (508) will introduce better and more varied food stuffs for own consumption and for sales (Project 706). Children and women in particular, will benefit from this new source of revenue, and from the nutritional knowledge and practices which will accompany it. Moreover, women will be encouraged to use the locally produced *Jatropha* Oil for light and cooking. This will liberate those women from the burdens of collecting wood for their households, and they are not exposed anymore to the heavy smoke which actually threatens their lungs.

Insertion Project 505 aims at a gradual **extension of the total surface of land for agriculture** during the years 2011-2015. The three production Scenarios published on our website show the rhythm of land extensions, the expected crops and revenues and some related agro-industrial aspects. Project 505 provides commercially viable surfaces of land to small-scale farmers and to GuKam who will – in the long run -- operate a medium size plantation. It also sees to it that immigrant farmers from the North of Togo will obtain a legal status and that they will be entitled to the same rights as the autochthon population which communally owns the land in our Canton. The rent to be paid for the farm land will enter a Community Fund (Project 903-6). Those funds will increasingly contribute to the financing of communal projects for health care, education and other infrastructural provisions. The farmers who participate in the Program are encouraged to plant 2/3 of their 5 hectares with *Jatropha* trees which require relatively little care and attention. The

remaining 1/3 part of the farms will be used for food crops and gardening. All farmers in the Target Area will be encouraged to plant protective Jatropha hedges around their farms and homesteads (Project 506). At least 240 km of Jatropha hedges will be planted during the first 4 years of the project. The seeds of those hedges will be sold to the future Oil Press (Project 710) or can be processed by women groups (Project 703).

The **Pilot Plantation (Project 503)** which GuKam has created, plays a crucial role within the Agriculture Program. This Plantation prepares literally all agricultural innovations and improvements, including the introduction of commercial gardening and the planting and harvesting of fast-growing wood for charcoal production – an effort which will help to stop the ongoing destruction of our woods. The Pilot Plantation moreover, develops Jatropha propagation material (seeds) and the best agronomic practices which together will result in high yielding Jatropha plants. The first series of systematic trials on the Pilot and observations of a selection of Jatropha plants growing in the wild, have resulted in very promising crop expectations.

Micro-credits (Projects 505-1 and 505-2) will enable local women groups and farming families to benefit from better propagation material, agronomic services, demonstrations, and participation in other projects offered by Tomoka's five Action Programmes.

List of ALL Projects in our five Action Programmes: see Document 6.8 in the section *DOWNLOADS* of our website www.tomoka-togo.com

PROGRAMME 1: AGRICULTURE

THE IMPROVED PRODUCTION OF FOOD, SPICES & JATROPHA-FOR-BIO-ENERGY

A summarizing, descriptive overview of the interrelated projects in this Programme is available in the DOWNLOADS section of our website www.tomoka-togo.com

PROJECT <i>Action Programme 1: Agriculture</i>			PHASE		
NUMBER	TITLE	MAJOR OBJECTIVE / DETAILS	CONCEPTION	PLANNING and/ or TRY OUT	IMPLEMEN- TATION
501	DOCUMENTATION	<i>Collection & Description of Program Related Professional Literature, Organisations, Expertise, Donors, Banks, Equipment</i>	X	X	X
502	AGRONOMIC EXPERTISE	<i>The objective is to hire an agronomist on a half-time basis in 2011 and on a full time basis during the following years to manage the Agric Projects and the ones which are related in the Environment Program. Daily Management, Training of local farmers and women groups, and the Conception and Preparation of Projects will be major duties</i>	X	(x)	
503	PILOT PLANTATION (PP) & FARM	<i>Development of High Yield Jatropha Propagation Material. Trials and Demonstrations of Improved Production of Food Crops, Gardening and Useful Trees (fruits, teak, bamboo, fast growing wood varieties for charcoal)</i> Location: Avégamé (centre of the Target Area in the Kpéképéta Zone) Surface: 50 hectares partitioned for the following functions: 5 hectares for Jatropha & intercropping trials 1 hectare for Gardening Experiments & Demonstrations 1 hectare reserved for small-scale agro-industry, buildings, nurseries & buildings for training and other services to the community 3 hectares for orchards (fruit and other useful trees) 40 hectares for Staple Foods (Farm): maize, beans, soja, yams, plantains, etcetera	X X X X X	X X X X	X X X X
503-1	PP - Construction	<i>Construction of a Multifunctional Building on the Service Area A tool shed, simple office space, temporary space for a Seed Bank (Jatropha Propagation material), stay-overnight facility for staff, and a house for the on site Manager (referred to as Maitre de Champs / MC)</i>	X	X	
503-2	PP – Nursery Extensions	<i>Improvement of Jatropha Nursery and Creation of Nursery for Fruit Trees The construction of a water pump will precede all other implementations Pump details are presented in Project 803</i>	X	X	
504	SEED BANK (BSB)	<i>Creation & Management of a Self-supporting Seed Bank Jatropha Propagation Material and collectively bought Seeds for staple crops and gardening will serve the community at advantageous prices</i>	X	X	

PROJECT <i>Action Programme 1: Agriculture</i>			PHASE		
NUMBER	TITLE	MAJOR OBJECTIVE / DETAILS	CONCEPTION	PLANNING and/or TRY OUT	IMPLEMEN- TATION
504-1	BSB – construction of building	<i>Construction of an appropriate building for Storage and Sales</i>	X		
504-2	BSB – micro credit for seeds and services	<i>Women Groups and Farmers will be enabled purchase seeds for Jatropha, stale crops and gardening</i>	X	x	X See also 505-1
505	INSERTION OF IMMIGRANT & LOCAL FARMERS	<i>Providing 180 Farming Families with new farms (5 hectares each) within the rhythm prescribed by the Production Scenarios & integrate them into the Program's Service scheme</i> In conjunction with Project 507 (Machine & Tool Pool) and Projects for safe drinking water (803), Sanitation (804), Farmer Organisations (805), and an organisation for the allocation and management of micro credits (709)	X	X	(x)
505-1	INS – settlement credits 2011	<i>Ten new immigrant families will be settled on new farms in 2012</i> Micro-credits will finance their settlement and production for the 1 st year <i>(The insertion rhythm 2012-2015 is shown in our Production Scenarios)</i>	X	X	X
506	JATROPHA HEDGES	<i>Table 11 in our Production Scenarios shows the rhythm for the Planting of 240 km of Jatropha Hedges around 300 farms in the period 2012-2015</i> This Project aims at Jatropha around 300 existing small farms. The Jatropha crops will supplement the farmer's income considerably. Micro-credits may facilitate the purchase of Improved Propagation material	X	X	
507	MACHINE & TOOL POOL (MTP)	<i>Essential machines like tractors and ploughs will provide the labour which is needed to clear and cultivate 5 hectares of new land per Family within the Insertion Program. This Project plays a KEY role in the Agric Program.</i> The purchase of a tractor, ploughs, tipper trailer, truck, brush cutters, and decorticating machines is essential. A semi independent MTP Unit will operate in such a way that it will finance itself via its Services to the local Farmers at a small profit – a profit which will enter the Community Fund (Project 906) GuKam has financed already some small implements like Brush cutters	X	X	(xx)
508	GARDENING BY WOMEN GROUPS	<i>Two women groups in Avégamé will participate in the Gardening Project 2011</i> Micro-credits will finance their seeds, implements/tools, land rent and water needs. This first experience is a Try-Out Project <i>(The gardening extension rhythm 2012-2015 will be worked out in 2012</i> <i>The GuKam Pilot Plantation is experimenting in 2011)</i>	X	X	(x)
509	MINI PILOT PLANTATION	<i>Testing the outcomes of minimal care and Cuttings used as propagation material.</i> Growth and Yield of Jatropha plants stemming from randomly collected cuttings Location: Danyi Bassape – Surface: ¼ hectare	X	X	X
510	GUKAM'S MID SIZE MODEL PLANTATION	<i>The production and extension objectives have been published in the ADOPTED SCENARIO published in the Agriculture section of the <Downloads> of our website.</i> Surface: 145 hectares (including 40 ha of the Pilot Plantation-reserved for staple crop experimentation) Location: Avégamé	X	X	(x)

PROJECT			PHASE		
<i>Action Programme 1: Agriculture</i>					
NUMBER	TITLE	MAJOR OBJECTIVE / DETAILS	CONCEPTION	PLANNING and/or TRY OUT	IMPLEMEN- TATION
511	CLEARING & BRINGING LAND INTO CULTIVATION	<i>1.050 hectares of unused, deforested land will be cleared, partitioned in small farms and brought into cultivation.</i> The Adopted Scenario published on our website presents the rhythm of clearing and allocating farms to (mostly undocumented) settlers, and to GuKam's Model Plantation.	X	X	(x)

A SUMMARIZING, DESCRIPTIVE OVERVIEW OF THE INTERRELATED PROJECTS OF EACH ACTION PROGRAM is available in the DOWNLOADS section of our website www.tomoka-togo.com

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