



ENVIRONMENT PROJECTS

PROTECTION, REHABILITATION AND SUSTAINABLE EXPLOITATION

OVERVIEW & LIST OF THE INTERRELATED PROJECTS OF ACTION PROGRAMME 2

aiming at protection, rehabilitation and sustainable exploitation of the Canton's natural environment for the social-economic benefit of our individuals and community at large

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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.

A list of ALL Projects in each Action Program: see the Content Table in the section *DOWNLOADS* of our website www.tomoka-togo.com

2 OVERVIEW OF ACTION PROGRAM 2:

ENVIRONMENT PROJECTS AIMING AT PROTECTION, REHABILITATION AND SUSTAINABLE EXPLOITATION OF THE NATURAL ENVIRONMENT

Tomoka's Target Area used to be covered by rain forests. However, most of it has disappeared within the last 15-20 years. Even valuable hard woods have been **turned into charcoal and have been used as firewood for cooking**. Togo's poor population is growing; and so does the demand for this cheap source of household energy. The rate of deforestation in our Canton is alarmingly high and increasing! The production of charcoal has even become the major source of cash income for most of the extremely poor subsistence farmers of our Canton – despite the fact that the Buyers from the cities only pay derisive low prices. Nobody ever replants trees. As a result, most of the Canton has been turned into a kind of savannah covered by hard to remove grasses (*chiendent*) which stifle other vegetation and make farming difficult. And another factor makes it even worse: Squatter farmers --most of them coming from the North of the country – are in the habit of settling down illegally and using a slash and burn method to clear the land, exploit it, and move onwards when the soil has become exhausted. Within the foreseeable future **the degradation of the soil** will reach a point of no return. **The local community does not benefit** from all this disastrous exploitation of the natural environment, despite the fact that all the land and its natural resources are communally owned by the autochthon (Ewé) population.

Tomoka intends to stop the above trends towards even more impoverishment. **Instead of exhausting the natural wealth of the Canton, several projects have been conceived to protect, restore and exploit it in a sustainable way.** **Awareness & curriculum** activities (Project 603 and 607) will not only focus on Schools, Women Groups and the Farmers who will use the Agricultural Services of the planned Machine & Tool Pool which are offered by Project 507. Awareness will be taken one step further by making protection and sustainable exploitation a binding, **contractual agreement** between Tomoka and the Chieftaincy on the one side, and the new (immigrant) farmers of the Insertion

Project (Project 505) in the Agricultural Program, on the other. These new, legally settled, farmers will be taught which useful trees on their new farms have to be protected and which ones can be exploited by them in the context of a sustainable exploitation project like the <Collection of Shea Fruits> (Project 606-1) in order to produce shea butter (=Project 717). The harvesting of leaves from Moringa trees (Project 606-2) is another example. Some farmers will be invited to join Project 608 which aims at the planting and exploitation of Fast Growing Wood for the production of charcoal (Project 608-1). It is a simple fact of life that the production of more environmentally friendly sources of energy like Jatropa Oil and solar will not be able to cover the energy needs of Togo's population in the nearby future. So, it is better to reduce the damage and turn the production of charcoal into an effort by which new plants absorb CO₂, and which deliver fair amounts of income to local farmers when they sell the fast growing wood to charcoal makers.

Before the Community of the Canton will be able to protect and exploit their natural resources, they have to know first which resources there are left to protect. Project 605 intends to **inventory** them. This exercise should be accompanied by a **property law enforcement mechanism**. That is why Project 603-3 proposes to create a kind of Nature Scouts who will be authorized to patrol the Canton, monitor the presence and activities of Charcoal Buyers, inform them of the fact that they need a license from the Chieftaincy to buy or produce charcoal in the Canton, and to fine charcoal producers if they cut protected trees. Further details will be worked out at a later point. But two aspects will surely be implemented: 1)The local Charcoal Producers will be organised into groups in order to get better prices from Buyers and to become more aware of their duty not to cut certain trees and to report their activities to the Nature Scouts (who also keep records of ongoing cutting); and 2)The Community Fund (Project 903-6) will cash the levies which Buyers pay when they are getting a Licence.

Sustainable exploitation of existing resources is another important aspect of Tomoka's Environment Program. Project 606 will take several lucrative initiatives – in particular for women. The collection of shea fruits (Project 606-1) in order to produce shea butter (Project 717) and the commercializing of dried Moringa leaves (Project 606-2) will be the first ones and will surely lead also to the planting of similar trees.

Planting and exploitation of useful trees (Project 608) is going to be being tried out extensively on Gukam's Pilot Plantation and its nurseries (Project 503). This will be the basis for a project by which all new Farmers referred to in Insertion Project 505 will plant fruit and other useful trees near their homesteads. Those nurseries will also supply the farmers who will specialise in the exploitation of fast growing woods for charcoal, teak for timber, bamboo for construction and furniture, etcetera. These agricultural efforts will provide the raw materials for future agro-industries like saw mills and furniture makers.

The agricultural production scenarios of the Agricultural Program present the exploitation plans for 1000 hectares of new farms. This includes a **reforestation effort** of roughly 630 hectares with Jatropa Curcas. This exercise and the plans presented in the above projects will contribute to a considerable CO₂ absorption. This is an asset by which the local community – via its future Community Fund (Project 903-6) – should benefit. That is why Project 604 intends to **commercialize CO₂ emission rights** – probably in close cooperation with our national government.

Altogether different aspects of Tomoka's efforts to secure environmental sustainability are the plans developed for giving the population **sustainable access to safe drinking water (Project 803) and to basic sanitation (Project 804)**. Tomoka considers these two initiatives a top priority - in line with UN Millennium Goal 7. Tomoka's Target Area with its extremely poor population cannot develop itself without these life and environment saving provisions. If the provision of clean water is accompanied by sanitation improvements (Project 804), the accumulative positive effects on health, economy, community life and the environment will quickly become apparent.

Several Projects in the other Action Programmes contribute significantly but indirectly to the protection, rehabilitation and sustainable exploitation of the Canton's natural environment. Examples are provided in the Agricultural Programme with its Gardening Projects (508), its regulated settlement of new farmers (Project 505) and GuKam's Pilot Plantation (Project 503). Similar indirect contributions are provided by several Projects in Action Programs 4 and 5 which aim at *organizing* the members of the Target Group in order to reach them, mobilize them and to enable them to benefit from their collective strength.

PROGRAMME 2: ENVIRONMENT

PROTECTION, REHABILITATION AND SUSTAINABLE EXPLOITATION OF THE NATURAL ENVIRONMENT

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 2: Environment</i>			PHASE		
NUMBER	TITLE	MAJOR OBJECTIVE / DETAILS	CONCEPTION	PLANNING and/or TRY OUT	IMPLEMEN- TATION
601	DOCUMENTATION	<i>Collection & Description of Program Related:</i> Professional Literature, Organisations, Expertise, Donors, Banks, Equipment	X	X	X
602	ENVIRONMENTAL EXPERTISE	<i>The objective is to recruit or obtain otherwise a full time officer who is an expert in the field and who will conceive and plan new projects and who will be responsible for daily management of this Program's projects.</i> Projects have to become financially independent in the long run – with subsidies and/or income generating components	X	(x)	
603	PROTECTION & PRESERVATION (PROPRES)	<i>Protection of useful trees and bio-diversity in our Canton is a top priority</i> The increasing rate of deforestation for charcoal production has to be mitigated and regulated. We start with trees which have also an economic potential	X		
603-1	PROPRES – contractual regulation	This Projects aims at desk research on communal property rights of natural resources and the juridical editing of several types of contracts and licenses – in particular with a view to Projects 505, 604, 606 and the cash flow of all kinds of exploitation projects towards the Community Fund (Project 906)	X	(x)	
603-2	PROPRES – awareness of useful trees	The population will learn which trees and plants are important enough to protect as much as possible. First, the accent will be placed on useful trees which will help them to generate an income in Project 606	X	X	X
603-3	PROPRES – nature scouts	Trained Scouts will patrol the Canton with the overall objectives to protect the existing biodiversity, to see to it that unlicensed deforestation does not take place, and to raise the nature-awareness of farmers and charcoal producers	X		
604	COMMERCIALIZING OF CO2 EMISSION RIGHTS	<i>The CO2 absorption by new reforestation efforts and the cultivation of 1000 hectares of (previously deforested)land should generate income for the Community of the Canton.</i> The officer referred to in Project 602 will survey the possibilities and conceive marketing ideas for Tomoka's Fund Raising efforts in Project 903-6	X		
605	INVENTORY	<i>The objective is a geographical and demographic mapping and a comprehensive inventory of the Canton's natural resources</i> In cooperation with or by relevant departments of the Universities in Lomé and Kara, and with support of the competent Ministries.	X	(x)	(x)

PROJECT <i>Action Programme 2: Environment</i>			PHASE		
NUMBER	TITLE	MAJOR OBJECTIVE / DETAILS	CONCEPTION	PLANNING and/or TRY OUT	IMPLEMEN- TATION
606	SUSTAINABLE EXPLOITATION (SUSTEX)	<i>Existing trees and other vegetation will be protected and exploited commercially by trained women groups</i> GuKam is trying out Bissap & Moringa gathering & commercialization as a try-out during 2011	X	(x)	
606-1	SUSTEX – shea fruits	<i>Women collect shea fruits with a view to project 717 =Production of shea butter from shea trees by women groups. Sales to foreign buyers (as is the case with some other Togolese projects) and to the future local soap ateliers</i>	X		
606-2	SUSTEX -- moringa	Production of moringa ‘tea’ from the leaves of the moringa trees by women groups. Sales to the markets in Lomé and on open air markets in the region. Packed moringa will follow at a later stage for sales in super markets	X	X	(x)
606-3	SUSTEX -- bissap	<i>Women collect bissap for own use in sauces (and will plant the harvested seeds near their homesteads in the nearby future)</i>	X	X	(x)
607	CURRICULUM DEVELOPMENT & TRAINING OF COMMUNITY LEADERS	<i>Community Leaders on all kinds of levels – including the teachers of the local schools – need to be trained on relevant subjects. Curriculum materials will be developed per target group.</i> In close cooperation with existing national and international efforts Low-cost visual materials will obtain an important place in campaigns – with a view to our high illiteracy figures	X		
608	REHABILITATION THROUGH (RE)PLANTING USEFUL TREES	<i>The general objective is to raise the number of high trees considerably and to exploit them if possible</i> <i>The Project aims moreover, at growing and commercializing fast growing trees and shrubs for charcoal, timber, and construction purposes.</i>	X		
608-1	REHAB – wood for charcoal	Fast growing trees will be planted and exploited for charcoal production	X		
608-2	REHAB – planting of useful trees for natural soap making	Fragrances and Natural Dyestuffs (Colors) will be needed for future Soap making. Trees will deliver many of the ingredients	X	X	(x0)
609	PLANT AN ENERGY TREE	This Fundraising Tool will enable local women to plant and harvest Jatropha on Community-owned land. Management by GuKam; Profits for the women involved and the Community Fund managed by Tomoka	X	X	(x)
610	PLANT A FRUIT TREE	See Project 609	X	X	(x)

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