ENVIRONMENTALLY-FRIENDLY VALUE CHAIN
(RENEWABLE FUELWOOD ENERGY FARM DEVELOPMENT PROJECT AND RESTORATION OF ECOLOGICAL INTEGRITY)

PROJECT SITES : Tobacco Growing Regions - Provinces

CAR	-	Abra
Region 1	-	Ilocos Norte, Ilocos Sur, La Union and Pangasinan
Region II	-	Isabela and Cagayan

PROJECT COST : First Year - PhP51,000,000.00

RATIONALE

Flue-curing is an inescapable process in the production of quality Virginia leaf tobacco. Flue-curing consumes an average of 28 cubic meters of fuelwood per hectare of Virginia tobacco.

Through the years the tobacco industry has been **blamed for the deforestation** in the tobacco growing regions, which **caused flooding, soil erosion and destruction of lives, properties and infrastructures**. Understandably, since the inception of Virginia tobacco in the 50's, with an average yearly production of 40 million kilos, **it has been deforesting about 3,000 hectares of 6 to 8 year old trees a year, which would have amounted to 180,000 hectares** at present. The problem is aggravated by similar indiscriminate cutting of trees by the households, the bakery and salt making industries. The sad reality is that **there is no conscious effort to replace the forest and indiscriminate cutting problem continues as time passes**.

The problem becomes more acute at present because of the issues of continuously increasing cost and growing scarcity, if not genuine lack of fuelwood. The death of Virginia tobacco industry, therefore, maybe antedated by the lack of fuelwood than by any aggressive global campaign against tobacco and smoking.

In addition to fuelwood, bamboos are used by the tobacco farmers for various purposes, e.g. for the construction of barns and sheds, for poles, for hangers, tiers and for curing sticks, in the curing not only of Virginia but also of Burley and Native tobacco.

To be meaningful and effective, therefore, the development of the Virginia tobacco industry should have a corresponding provision of forest tree planting to restore **the ecological integrity** of the tobacco growing regions and provide for curing **fuelwood requirement** for the curing of the quality Virginia leaf, at present and in the future.

The said provision should include bamboos, which, as earlier said, is widely used in the flue-curing of Virginia and air-curing of burley and native tobacco.

DEMAND FOR FUELWOOD AND BAMBOOS

Demand for fuelwood can be estimated from the projected production of Virginia tobacco in the year ahead, up to 2020, when Virginia tobacco, with the intended pursuance of quality tobacco production, will range from **45 to 56 million kilos**, for an average of nearly **50 million kilos per year**. This will constitute more than 60% of total tobacco production which, by the end of the period, will **reach 98 million ki**los, 84 million kilos of which will come from the major growing areas of regions I, II and CAR.

Tobacco farm hectarage will grow correspondingly to more than **27,000 hectares** for Virginia and about more than **39,000 hectares** for all tobacco types in major growing areas, and more than 46,093 hectares, if we are to include all the other growing areas, not specifically defined as major growing area for each tobacco type.

At the said production levels, annual demand for fuelwood is estimated at between **613,000 cubic meters** in 2013 **to 780,000 cubic meters**, in 2020, which will necessitate the cutting of between **5 million to 6 million of at least three-year old trees** a year, for the period.

It is projected that to fully satisfy requirement, there is an urgent need to plant between 6.6 million trees in 2013 to **7.5 million trees,** in 2017, for a total of **35 million trees, including allowance for mortality,** for the period.

Additional demand is projected for bamboo, which as earlier presented, is commonly used in the construction of curing barn and shed structures, bamboo poles, hangers or tiers and curing sticks.

It was estimated that for a half-hectare farm of **Virginia tobacco**, the farmer will need a total of **180 pieces of bamboo**; and, for **burley and native tobacco**, some **200 pieces, 140 pieces** of which will be used for the curing structure.

It was estimated, too, that **10% of tobacco farmers** need replacement of any or all of these components in the curing of tobacco. Given these utilization rate, it is projected that **1 million to 1.5 million bamboos** yearly will be needed between 2013 to 2020, **78%** of which will come from the Virginia tobacco provinces and **22%** from the burley and native tobacco provinces of Isabela **(56%**), Cagayan **(18%)** and Pangasinan **(26%).**

CONCEPTS AND OBJECTIVES

In general, the project is designed as a comprehensive and self-generating industry intervention, intended to improve the economic and living conditions and raise the quality of life of the population, especially the tobacco farmers, in the tobacco growing regions.

More specifically, the project aims:

1. To restore the ecological integrity of the tobacco growing regions and contribute in reducing the effects of flash floods, soil erosion, and other weather-related calamities;

2. To augment, provide adequate supply of the fuelwood energy requirement for the flue-curing of virginia leaf tobacco;

3. To provide watershed factor to replenish fresh water used by household and for irrigation; and,

4. To promote the development/creation of cooperative agri-business enterprises for the tobacco farmers and tobacco growing communities.

The project will promote the planting of ipil-ipil trees (*Leucaena leucocephala*) because of its various benefits:

1. fast growing variety;

2. wide versatility/variety of uses – firewood, round post, lumber, raw material for wood- based products;

3. ipil-ipil leaves are superior organic fertilizers; and

4. leaves are good protein source for livestock feeds.

5. Enrich the soil by fixing nitrogen

In addition, ipil-ipil thrives well in a wide range of climate and is resistant to pests and diseases.

The project will include 10% Neem tree (*Azadirachta indica*) and other hardwood/apex trees, which will not be cut for fuelwood but for the restoration of the ecological integrity of the region.

(Other **tree species** considered**,** as recommended by the DENR/Regional Field Offices include, among others, *Acacia auriculifornus* (auri), cutting cycle of 10 to 12 year, harvest of 17-20 cu.m.; *Acacia mangium* (mangium), 9 years, 415 cu.m.; *Gmelina arborium* (yemane), 8-12 years, 30 cu.m.; *Paraserianthes falcataria* (moluccansau) , 8-12 years, 25-30 cu.m.; and, *Gliciridia sepium* (kakawate), 8-10 years, 40 cu.m..)

COMPONENTS, STRATEGIES AND TARGETS

The Project will involve three (3) major component activities:

Activity 1 - Seedling Production and Distribution - (Tree Seedling, Bamboo Seedling)

Activity 2 - Synchronized Tree Planting Day (In June or July)

Activity 3 – Kahuyang Pangkabuhayan at Pangkalikasan, that will include

a. Individual Backyard Energy Farm
b. Cluster Energy Farm
c. Communal/Cooperative Energy Farm

Activity 4 – Technology Research and Business/Enterprise Development.

a. Organic Fertilizers and Pesticide Extracts
b. Feed Component
c. Bamboo/Wood Products/By Products

Activity 1- Seedling Production and Distribution

This component activity is intended:

1. to make available to the tobacco farmers and tobacco growing communities tree seedlings, particularly the fast growing giant ipil-ipil trees, primarily for fuelwood energy;

2. to generate involvement/participation and support of the various sectors of society for the effort; and

3. to utilize the potential resources (idle land, manpower, equipment, etc) of local communities, SCUs/Public Schools and individual farmers in the reforestation effort of the government.

Targets:

This activity shall target to raise between 2 to 3 million tree seedlings, for total of **13.8 million** composed of fast growing fuelwood species and hardwood/other tree species, per year between **2013 to 2015**.

These will be grown in tree seedling nurseries strategically located in various provinces and municipalities of the region, with an area between 1.6 to 2.2 hectares a year from 2013-2017. Assuming a 220 sq. m./ 30,000 seedling capacity per nursery, some 71 to 100 seedling nurseries will be established every year by the NTA.

This shall be undertaken through a **Branch Office-managed seedling nurseries** or through a **supervised, farmer/cooperative-based seedling nurseries,** depending on availability of land and other resources by the different branch offices.

Abra and Ilocos Sur 2, as the centers for fuelwood energy farm development, will, in addition to their respective **"quota" of free seedlings** for their farmers at 20 seedling each, will produce additional tree seedlings for distribution and/or to support commercial production, should farmer cooperators decide to avail of such assistance instead of raising their own tree seedlings.

For the free tree seedling distribution the Agency targets to provide some 3 million seedlings up to 2017, starting with the 575,000 for the first year alone.

This activity will also include seedling production for bamboos, for a total of 920,000 between 2013 to 2017 with the provinces of Isabela, Cagayan and Pangasinan as principal growing areas. As requirement for Virginia tobacco growing areas is very substantial, they will likewise be given their share corresponding to their number of farmers.

Similar to tree seedlings, free bamboo seedlings will be provided for the tobacco farmers for which purpose 255,500 will be distributed up to 2017, 51% (129,500) of which for Virginia growing provinces.

Budgetary support for tree seedling production per 30,000 seedling capacity module, will amount to a maximum of PhP 67,000.00 to include, as follows: Basic Inputs of PhP 52,420 and MaFI (manpower, facility, irrigation, others) support of PhP 14,500.00, to be provided on a strictly needs basis, depending on the peculiar condition of the area.

From an Initial budget of P2.81 million in 2013, the amount of PhP 5.8 million a year will be needed, for a total of PhP25.83 million up to 2017.

Strategies:

Establishment and maintenance of a seedling nursery:

1. The branch offices, through their Tobacco Production and Regulation Officers/Agriculturists, shall scout for available, ideal sites, in strategic locations, for nursery establishments.

   The site must be strategically placed and, ideally, should not be more than 10 kilometers away from the pre-identified planting site/s to reduce mortality rate.

2. The Branch Office shall conduct information campaign and generate participation/ support of the Local government units and communities for the project.

3. Put-up a tree seedling nursery/ies of about 220sq m\ per set-up, composed of planting area\beds and working space, (of 30,000 seedling capacity) using low-costs indigenous materials in the locality.

   The number of and distribution of nurseries/tree seedlings to be planted per site will depend on the hectarage planted/number of farmers planting to Virginia tobacco. The 30,000 tree seedlings capacity will cater to the requirement of some 1,500 farmers.

   The **Branch Office may consolidate nursery areas to attain economies of scale**, provided however, that the same will not be far from the targeted sites for fuel production.

4. The NTA shall coordinate with the DENR-Regional Field Units for the source of certified seeds to be planted.

5. Preparation, sowing and care of seedlings.

   The provincial project coordinator shall be responsible in supervising the preparations of the needed materials like soil, bag for packing, and seed sowing and care of the seedlings.

6. Continuing Seedling Production and Distribution

   After a period of three (3) months care and cultivation of the sown seeds in the plastic bags, tree seedlings shall be distributed primarily to all tobacco farmers and interested individuals to be planted in their own area/lots available and accessible to be monitored by Tobacco Production Regulation Officers (TPROs) and Agriculturists of the Branch Offices concerned for the tree seedlings growth and development.

   The farmer-recipients and interested individuals must sign the receipts upon distribution of seedlings.

Activity 2- Declaration of Synchronized Tree Planting Day in June for the Philippine Tobacco Industry (or July in time for NTA's Anniversary)

The activity will be undertaken to create an impact and build the Agency/industry's image and growing concern for the environment.

This will **capitalize on the existing policy/program directing all employees and students 12 year and above to plant 10 trees every year.**

This is also in consonance with **Article 18** of the WHO-Framework Convention on Tobacco Control (FTC), care for the environment, making same a favorite CSR project by some tobacco companies.

The NTA Administrator will choose a particular day of every year, preferably in June (Start of the rainy season), as **Synchronized Tree Planting Day for the Philippine Tobacco Industry or in July, as a component activity, to coincide with the NTA Anniversary Celebration.**

The activity should **involve all the stakeholders** of the Virginia tobacco industry, particularly the beneficiary Local Government Units of RA 7171 and 8240, the State Colleges and Universities, the government offices, the schools, civil societies, environmental groups, youth groups, churches and community members and tobacco farmers.

Contributory to the Greening Program of the Government, the above sectors will be encouraged to participate pursuant to Section 3 of Executive Order No. 26 **(Declaring An Inter-Departmental Convergence Initiative for A National Greening Program),** Section 3.1 Social Mobilization of which provides in Section **3.1.1** that "All students, identified by the DEPED and CHED and all government employees shall be individually required to plant a minimum of ten (10) seedlings per year in areas determined by the Convergence Initiative. Private Sectors and civil society groups shall likewise be encouraged to participate in the NGP. Section **3.1.2** provides that with appropriate assistance from the government and the private sector, the People's Organizations (PO's) shall be given the primary responsibility of maintaining and protecting the established plantations.

Seedlings will come from the Seedling Production and Distribution activity of this project.

A **Ceremonial Planting site** (center) may be selected from among the state colleges and Universities in the Ilocos Region, and a top Official of the Government may be invited as Guest for the said Ceremonial Planting, which should have a local and national media coverage.

The **prospective sites** include the Mariano Marcos Memorial State University, in Batac, Ilocos Norte, Ilocos Sur Polytechnique College in Sta Maria, Ilocos Sur, Abra State Institute of Science and Technology in Lagangilang, Abra, Pangasinan State University in Sta. Maria Pangasinan, Don Mariano Marcos Memorial State University in Bacnotan, La Union, Isabela State University in Echague, Isabela and Cagayan State University in Tuguegarao, Cagayan.

Either **the Secretary of Agriculture or the President of the Philippines** may serve as Guest of Honor for the first year of the activity, which may be done within the five-year term.

Strategies:

1. Declaration of the Administrator of the Synchronized/Simultaneous Planting Day and the Ceremonial Planting Site/Center

2. Organization of Inter-Agency/Intersectoral Committee
   Task groups to attend to specific activities

3. Massive Multi-media Information Campaign

4. Coordination with the DENR as to prospective collaborator

   Possible source of additional certified seeds and/ or tree seedlings
   Possible planting sites
   Other technical requirements

5. Communication and Solicitation of Participation and Support

   State colleges and universities
   Department of Education and Culture, CHED
   LGUs and other government institutions;
   Civic organization and youth groups
   Churches
   Cigarette Manufacturing Companies, Wholesale Tobacco Dealers, Tobacco Trading Centers (This may form part of *their* **CSR** activities)
   Farmers' Organizations / Cooperatives
   Others/ Community leaders and members

6. Assignment of specific Planting Site per participating groups, including other arrangements

7. Mobilization of Necessary Resources/

   From the Tobacco Private Sector
   Public and private schools
   Government offices
   Local government units
   Fellow officers in government
   NGOs and Civil Society Organizations

8. Coordination with the Media

9. Actual Synchronized Tree Planting Day

10. Documentation

11. Activity Reporting

Targets:

The actual tree planting activities shall be implemented throughout the tobacco growing provinces of Region I, II and CAR (Abra) once a year.

For planting year 2013, **at least 500,000 tree seedlings** will be targeted to be planted.

The agency, however, may decide to **work for the GUINESS BOOK OF WORLD RECORDS, to compete on the MOST NUMBER OF TREES PLANTED IN ONE DAY**, to target planting of at least **one (1) million trees**, to beat Pakistan, at more than 541,176 mangroves planted by some 300 volunteers in India River Delta, that beats India with 447,874 trees; or, Camarines Sur that planted most number of trees in 15 minutes last 20 February 2011 at 64,096, to beat India at 50,033 trees in 2010.

The project may provide for incentives to include awards for the following:

a. Participating groups with most number of participants;
b. Participating groups with most number of trees planted; and,
c. Most number of tobacco farmers family who participated, among others.

Certificates of participation will be issued to participating groups and individuals using tobacco handmade paper.

Activity 3 – Kahuyang Pangkabuhayan at Pangkalikasan
(Backyard Energy Farm, Cluster Energy Farm, Communal/Cooperative Energy Farm Modules)

This is intended as a **commercial fuelwood production venture, to provide additional livelihood to tobacco farmers and/or tobacco farming communities.**

This will cover the bulk of the target for the project to plant **4 – 4.5 million seedlings/ trees** for a net of 3.5 to 4 million trees/ year for a total of 21 million trees, between 2013 to 2017. This will cover a total of 1,400 to 1,600 hectares, total of 7,500 hectares for commercial fuelwood farming venture.

Maximum Production Assistance Per Hectare for Kabuhayan Tree Module

The Maximum Amount of Production Assistance that will be provided by the NTA to the farmer-cooperators for the purpose will be **PhP30,000.00 per hectare**. This is in accordance with the production guide provided by the DENR/Bureau of Forest Development.

The amount will be given on a strictly needs basis, based on the pre-approved Farm Plan and Budget and Release Schedule which the Farmer-Cooperators/Farmer Cooperatives will prepare in collaboration with NTA Field Implementing Team.

Starting with P42 Million in the first year, a total of P225 Million is projected to be provided to 2017.

Kahuyang Pangkabuhayan will include 2,795 hectares of Bamboo module up to 2017, to start with 739 hectares in 2014, for the planting of nearly 600,000 bamboos, 85% will be located in Isabela, Cagayan and Pangasinan.

Production assistance for Kabuhayan Bamboo production module amounts to PhP 60,000 per hectare. Starting with PhP44.36 million in 2014, a total of PhP 167.67 million is projected to be provided for the said period.

All Production Assistance will be paid back in accordance with pre-agreed repayment schedule, with a charge of a one-time administrative/processing fee and interest charge of 1% per application and 6% per annum, based on balance respectively.

This Kahuyang Pangkabuhayan at Pangkalikasan will be composed of the following components:

1. **Backyard Energy Farm by individual tobacco farmers, set at 1 to 3 hectares.**

   The specific objectives:

   a. To tap every available land of the farmers for fuelwood energy production, for farmers own consumption and as additional income livelihood source; and,

   b. To help utilize qualified tobacco or individual farmers to restore/maintain ecological balance in the area.

Strategies:

a. Identification and training of focal persons per branch office, to prepare them for their implementation of the project/module.

b. Information Campaign. To inform the community about the project and the assistance that it will provide, **to individuals and/or tobacco farm clusters,** for fuelwood production as livelihood.

c. Training of the participating tobacco farmers for their effective participation in the project.

d. Preparation of individual/cluster plans, fund release and repayment schedule and Contract Setting /MOA.

e. Actual implementation of Backyard Energy Farm Production Activities.

f. Technical Assistance and Monitoring by Tobacco Production Regulation Officers (TPROs) and Agriculturists of the Branch Offices concerned.

g. The trees can be harvested only after 4 years for use as fuelwood in their curing of tobacco.

2. **Cluster Energy Farm (5 to 10 Hectares)** to be undertaken by traditional farm clusters registered/listed and previously assisted, with good performance record with the NTA.

3. Communal/Cooperative Energy Farm (at least 20 hectares)

The specific objectives:

a. To establish fuelwood tree plantations in support of quality Virginia tobacco production in the growing provinces;

b. To provide adequate sources of fuelwood for flue-curing Virginia leaf tobacco to tobacco farmers; and,

c. To utilize the potential of farmer cooperatives/local communities in the reforestation efforts and restoration of ecological integrity of the region.

Strategies:

The Establishment of Communal Energy Farm Plantations by Tobacco Farmers Cooperatives/Associations and/or Community/Civic Organizations. Each communal energy farm will have a minimum of 20 hectares.

a. Identification and Training of Focal Persons per Branch Office to prepare them for the Activity

b. Information Campaign for prospective participants cooperators

c. Submission of intention to Participate

d. Evaluation of Capability and validation of information, conduct of field surveys for the potential area committed to the project

e. Preparation of plan, fund and release schedule

f. Signing of Memorandum of Agreement

g. Release of Assistance in accordance with pre-agreed plan and release schedule;

h. Implementation of the project in accordance with the approved plan and budget

i. Technical Assistance and Monitoring by the NTA

j. Harvesting of the tree plantation, sale of the produce and repayment of production assistance.

ESTIMATED FARMER INCOME FROM KABUHAYAN FUELWOOD FARMING

The prevailing price of fuelwood at present is PhP 500.00 per cubic meter. Following the project's production scheme of only 90% fuelwood and production of only 280 cu.m./hectare, at an 80% yield target, the Farmer will earn P112,000, for his cash investment of P30,000.

After deducting production assistance of PhP 30,000 per hectare, plus interest and processing fee of PhP 4,800, the farmer will earn **PhP 77,200 gross profit,** for the first year harvest alone.

FTSD projects, that the farmer-cooperators, with a minimum investment and effort but through proper culture and maintenance, can harvest at least 40% (up to 60%) of yield every year thereafter, valued at P56,000, per hectare for a total earning of P336,000 for a five-year period.

The 1,400 hectare planting in 2013, will therefore earn for the farmer P157 million and a total of P470 million up to 2020.

FARMERS INCOME FROM PANGKABUHAYAN BAMBOO FARM

From a hectare farm of bamboo plantation, farmer-cooperator can earn P404,000 for a four year harvesting period, starting from the 4th year, with an initial amount of P37,000 and to peak at P184,000 in the 4th year of harvest.

Deducting all cash and non-cash cost, a net earning of P105,000 will be realized by the farmer-cooperator, with all his invested labor paid for the whole duration.

Following this computation, the 739 hectare Kabuhayan plantings will generate an income of P 298 million to 2020.

For the total coverage of 2795, the total earning from the 4-year harvest will amount to P1.13 billion; and 1.63 billion, if we are to include the 1,250 hectare,equivalent, for bamboo backyard plantings by the farmer.

For the period 2017 to 2020, project duration, the income earning from Pangkabuhayan Bamboo Farm will amount to P 495 million, even with the last batch of planting at its initial harvesting period.

Following the projects planting schedule from 2013 to 2017, farmers cooperators of Pangkabuhayan Fuelwood Farms will earn nearly P157 million in 2016 to 506 million in 2020 for a total gross earning of P 1.64 million for the period.

SATISFACTIONOF DEMAND/SELF SUFFICIENCY LEVEL

At a progressive rate, the project have met the demand for fuelwood, starting with 71% in 2016 to 217% in 2020, for a total output of 1.69 million cubic meters, which would indicate that the project will provide the requirement of other industries (potteries, bakeries, salt making)

For bamboos, overall sufficiency level was 135%. Starting at 64% by 2017 to 282% by 2020, at a total yield of 4.13 million poles, which excess will serve demand of others sectors/industries like aquaculture and furniture industries among others.)

ADDITIONAL JOBS GENERATED FOR THE FARMERS

Based on the data, from DENR Bureau of Forest Development, a hectare of land planted to ipil-ipil, will need labor, equivalent to 61 mandays or 0.68 jobs and 3.15 jobs for bamboo plantation. For the project's three-year implementation, therefore, a total of 12,758 additional jobs will be generated for a total value of PHP267,535,260 million.

	Jobs Generated	**Value of Jobs Generated**
Year 1	956	20,047,320.00
Year 2	3,178	66,642,660.00
Year 3	3,309	69,389,730.00
Year 4	3,153	66,118,410.00
Year 5	2,162	45,337,140.00
TOTAL	**12,758**	**267,535,260.00**

This however excludes the job generated in nursery management/seedling production and backyard planting of the farmer.

Activity 4 - Research and Enterprise Development

With the end view of creating more livelihood/business enterprises to augment the income of the farmers, an integral component to the project is research and development, and for commercialization later, focusing on, among others, the following:

1. Organic Fertilizer development using ipil-ipil leaves
2. Organic Pesticidel development using neem extracts
3. Ipil-ipil leaves as feed component
4. Wood and bamboo products and by-products

This will be coordinated with proper government agencies and R & D councils to facilitate the development and adoption of appropriate technologies and the subsequent commercialization thereof.

Details of proposal will be formulated by the Technical staff of the Project/ NTA Department

BUDGETARY REQUIREMENT

For the implementation of the project for the five year period, the NTA will need a total of P451 million which as intended will be sourced out from its Special Account in the General Fund (SAGF – 151). The amount of P51 million is allotted for its initial implementation in 2013. The amount will be broken-down by year and expenditure class as follows:

Year	Investment Outlay (PhP-M)	Nursery Establishment (PhP-M)	Admin. MOOE (PhP-M)	TOTAL (PhP-M)
2013	42,000	7,575	1,425	51.000
2014	87,740	8,760	3,500	100.000
2015	87,280	9,220	3,500	100.000
2016	87,440	9,060	3,500	100.000
2017	87,544	8,956	3,500	100.000
TOTAL	**392,004**	**43,571**	**15,425**	**451.000**

ESTIMATED AGENCY INCOME

For the Production Assistance the Agency maybe expected to earn some PhP117.42 million from Administrative Fees and Interest Income, PhP17.81 million and PhP99.61 illion respectively.

PROGRAM MANAGEMENT AND STAFFING REQUIREMENTS

Implementing Agency

The NTA shall be the lead agency in the implementation of the Project. As such it shall be responsible for the over-all implementation of the program.

Cooperating Agencies and Their Roles

The following Agencies shall be actively involved in the implementation of the project, with their respective roles/contributions, as follows:

1. Department of Environment and Natural Resources (DENR) thru its Regional Field Offices shall assist in the identification of project sites; train implementing staff; provide the technical assistance and support in the implementation of the Project.

2. The Department of Education and Culture and Sports (DECS) thru its Regional Field Offices shall oversee the participation of schools and students in the tree planting activities.

3. The Local Government Units (LGU's) shall provide assistance in the campaign, the establishment of seedling nurseries; participate actively in tree planting, the protection of tree farms/tree plantations from fires, squatters, and from illegal cutters.

4. Tobacco Private Sector – assist through the establishment of seedling nurseries, donation of seedlings, provision of logistical support, participation in the tree planting activities, including participation of their satellite trading centers and staff in the tree planting and other activities of the project.

5. Non-Government Organizations – participation in the establishment of nurseries and in the tree planting activities

6. Tobacco Farmers Organization – active participation in the campaign and in the overall implementation of the project.

PROJECT MANAGEMENT

The project will be implemented through the following:

Interagency Coordination Committee

NTA
DENR-Head and Regional Office
DECS
LGUs
Private Sectors

National Management Team

NTA Administrator	-	Over-all Chairman
Board of Director	-	Over-all Vice-Chairman
DAPM	-	Member
DAOP	-	Member
DAALM	-	Member
Finance Manager	-	Member

Planning and Monitoring Team

Manager, Corporate Planning Dept.	-	Chairman
Manager, Internal Audit Service	-	Vice Chairman
Div.Chief, PPED	-	Member
Information Tech. Officer V, MISD	-	Member
Accountant IV, Finance Dept.	-	Member

Technical Support Team

Manager/OIC, FTSD	-	Chairman
Div. Chief, PSSD-FTSD	-	Vice-Chairman
Div. Chief, Tob. Leaf Reg. Div.	-	Member
CDO III, PSSD	-	Member

Branch Implementing Team

Branch Office Managers	-	Chairman
Division Chiefs	-	Vice Chairman
Supervising Agriculturists	-	Member
TPROs/Agriculturists I and II	-	Members

Abra
Ilocos Norte
Ilocos Sur I-Vigan
Ilocos Sur II-Candon
La Union
Pangasinan
Isabela
Cagayan

PROJECT MONITORING, EVALUATION, AND REPORTING

The NTA Agriculturist/TPRO assigned to supervise and monitor the project shall be required to submit bi-monthly reports (FEDP FORM 4-NSD) and the post operation reports (FEDP FORM 5-NSD).

Other monitoring forms required are: FEDPP FORM 1-NSD and FEDP FORM 2-NSD.

The reports shall be consolidated by the Provincial Project Officers (PPOs) and submit the same to the National Project Officer (NPO) for evaluation and final consolidation.

The FTSD and Corporate Planning Department (CPD) shall conduct evaluation of the project implementation on a quarterly basis.

Reported problems shall be acted immediately, at various levels.

GENERAL WORK PROGRAM

A Nursery activity should be a continuing undertaking of each Branch Office for a period of 5 years, from CY 2013-2017. The major activities and duration are as follows:

ACTIVITIES	DURATION
1. Project Submission and Negotiation 2. Project Approval and Release of Funding	2 week
3. Conduct of Information/Dissemination Campaign	2 weeks
4. Project Team mobilization and Training	2 weeks
5. Invitation of Participation of Various Agencies and Sectors	3 weeks
6. Identification, Pre-assessment and Selection of Project sites and Farmer-cooperators 7. Orientation and Planning with Cooperators 8. Contract setting/MOA signing 9. Release of funding to the involved parties 10. Establishment of nurseries (NTA)	4 weeks
11 .Operational Activities in the Nursery	4 weeks
11.1 Land preparation, soil bagging/seed sowing cutting propagation 11.2 Cultivation/management and care of seedlings 11.3 Distribution of seedlings to interested/ targeted beneficiaries	In process
12 .Campaign and Mobilization for the Synchronized Tree Planting Day	12 weeks
13. Implementation of the Synchronized Tree Planting Day	1 day
14. Info Campaign and Invitation in connection with the implementation of Kahuyang Pangkabuhayan at Pangkalikasan (Commercial Fuelwood Energy Farm)	3 weeks

15. Evaluation of applications and verification of sites, with the assistance of the DENR	3 weeks, on going
16. Approval of applications and finalization of projects work and financial plans	3 weeks
17. Signing of Memorandum of Agreement, including fund release and repayment schedules	2 weeks
18. Documentation and Reporting	1 week
19. Provision of production assistance for the Backyard and Communal Energy Farm Project, according to release schedule	Per release schedule
20. Implementation of Activities	In process
21. Monitoring and evaluation	16 June 2013 to 31 May 2017
22. Reporting System	Continuous from 16 June 2013 to 31 May 2017

PROGRAM BUDGET
See Annex " for details"

TOTAL - PhP51,500,256.00

IMPLEMENTING GUIDELINES FOR
RENEWABLE FUELWOOD ENERGY DEVELOPMENT PROJECT AND
RESTORATION OF ECOLOGICAL INTEGRITY

CY 2012-2013

To ensure the attainment of the objectives and the smooth and orderly implementation of the project in the light of auditing, accounting and legal requirements, the following guidelines are hereby promulgated:

POLICY STATEMENT:

Pursuant to Board Resolution Nos. 243-2012 (Corporate Operating Budget, FY 2012), and 265-2013 (Agency Plan and Budget, FY 2013), the National Tobacco Administration (NTA) has adopted the Renewable Fuelwood Energy Development Project and Restoration of Ecological Integrity (RFEDPREI) for the tobacco growing regions.

OBJECTIVES:

The **PROJECT** is designed as a comprehensive, self-generating industry intervention, generally aimed to improve the living conditions and betterment of quality of life of the population in the tobacco growing regions:

More specifically, the project aims:

1. to restore the ecological integrity of the tobacco growing regions and an contribute in the government's mitigation efforts against flash flooding, soil erosion, and other calamities;

2. to supply/augment the energy-fuelwood requirement of flue-curing virginia leaf tobacco;

3. to provide watershed factor to replenish fresh water used by household and for irrigation; and,

4. to promote the creation/development livelihood enterprises (fuelwood, organic fertilizer, pesticide, etc.) for the tobacco growing communities.

IMPLEMENTING STRATEGIES/COMPONENTS:

To effectively achieve above objectives, the project will be implemented with the following component strategies:

1. Tree Seedling Production and Distribution, to be established either as a branch-managed (directly) or branch–supervised (through farmer-cooperators/associations) activity;

a. For Tree Seedling

The standard seedling nursery size shall have a capacity of 30,000 seedlings which shall be given a basic production assistance of PhP52,420 and a strictly need-based contingency fund not more than PhP14,500.

b. The lowest seedling capacity that shall be given assistance is PhP10,000 seedlings for a corresponding production of PhP17,350.00. However, they will no longer be entitled to the contingency fund as provided for the standard size nursery.

c. Consolidated nursery(s) of more than 60,000 seedling capacity with special requirement beyond what is specified in the project, ex. site improvement, shall be subject to prior approval by the Administrator.

2. Synchronized Tree Planting Day in July (to coincide with NTA Anniversary), to be declared by the NTA Administrator in collaboration with DENR and to be participated in by the different government agencies, local government units, tobacco companies, tobacco farmers and families, students, and civil society organizations.

A maximum of 10% of the total seedling to be produced by the project will be distributed for free to the tobacco farmer at 20 seedlings per farmer (Annex __).

3. Kahuyang Pangkabuhayan at Pangkalikasan, composed of the following modules:

a. Farmer's Backyard Energy Farm (up to 5 hectares)

b. Cluster Energy Farm (up to 15 hectares)
(Accredited/registered as a cluster at NTA)

c. Communal/Cooperative Energy Farm (at least 20 hectares)
The cooperative/organization should have a juridical personality.

4. Research and Business/Enterprise Development. Provided, however, that proposal shall undergo the same review and evaluation process as the usual project proposals of the agency, and approved by the Administrator.

ANNUAL SCOPE/TARGET:

1. Proposed Distribution of Tree Seedling Nurseries by Branch.

Branch	ANNUAL		TOTAL Number of Seedlings
	Number of Nursery	Nursery Area (sq m)	
Abra	25	6,000	1,000,000
Ilocos Norte	5	1,000	200,000
Ilocos Sur-Vigan	5	1,000	200,000
Ilocos Sur-Candon	25	6,000	1,000,000
La Union	2	1,200	400,000
FTSD	1	3,500	500,000
Total	**63**	**18,700**	**3,300,000***

***400,000 for distribution; 2,850,000 for Kabuhayan

N.B. Nursery area may be consolidated to achieve economies of scale, depending on the strategic location of the site.

2. Bamboo Seedling Nursery

Branch	ANNUAL		No. of Seedlings
	Number of Nursery	Nursery Area (sq m)	
Cagayan	1	2,500	25,000
Isabela	2	5,000	50,000
Pangasinan	1	2,500	25,000
Total	**4**	**10,000**	**100,000**

3. Kahuyang Pangkabuhayan at Pangkalikasan

Branch	ANNUAL	No. of Trees to be Planted	(Seedling Requirement including allowance for mortality)
Ilocos Norte	140	350,000	385,000
Ilocos Sur-I	140	350,000	385,000
Ilocos Sur-II	460	1,150,000	1,265,000
La Union	200	500,000	550,000
Abra	460	1,150,000	1,265,000
Total	**1,400**	**3,500,000**	**3,850,000***

***1,000,000 seedlings (for 400 hectares) will be grown by Pangkabuhayan Cooperatives

QUALIFICATIONS/OBLIGATIONS:

The **Farmer Cooperators** shall –

1. Make available a parcel of suitable land for the project;

2. Follow strictly the prescribed technology particularly for the establishment/maintenance of seedling nursery, establishment/management of Kabuhayan fuelwood energy farm, and Kabuhayan bamboo farm from

land preparation, transplanting, fertilization, watering, irrigation, pest management, harvesting, and marketing of produce;

3. Provide the necessary farm equipment and labor required by the project in the production of quality seedlings/fuelwood as specified in the project;

4. Accomplish all the forms and other documentation requirements under the project;

5. Use the production assistance exclusively for the project;

6. Repay production assistance conscientiously according to pre-approved payment schedule;

7. Assist in the documentation of the project and submit required reports, farm/harvest data, given the formats, as maybe needed;

8. Perform such other activities that may be determined/prescribed by the NTA as may be necessary in the proper, efficient and effective implementation of the project.

BUDGETARY SUPPORT/MAXIMUM AMOUNT OF PRODUCTION ASSISTANCE:

The production assistance shall be based on the approved Farm Plan and Budget (RFEDPREI Form No. 1a) and shall not exceed the following amounts:

Maximum Funding for Production Support:

Particulars	Amount (PhP)/ Nursery
1. Tree Seedling Production	67,000.00 (for standard size nursery)
2. Bamboo Seedling Production	700,000.00
3. Kahuyang Pangkabuhayan at Pangkalikasan	
3.1 For Tree/Fuelwood Energy Farm	30,000.00
3.2 For Bamboo Farm	60,000.00

The above amounts shall be provided to the Farmer-Cooperators (FCs) and shall cover the following:

a. Seedling production
b. Fuelwood Production
c. Bamboo Production

(See attached Annex).

ADMINISTRATIVE CHARGE AND SERVICE FEE:

The production assistance to be provided by the NTA shall be subject to an administrative charge of 6% per annum and a one-time service fee of 1%, both of which will be paid from the proceeds of the sale of produce.

Computation of administrative charge/s shall commence on the date of receipt of the NTA production assistance by the FC, as shown in the disbursement voucher/cash input voucher (CIV) signed by the farmer and issued by the Branch EW/Cashier. The administrative charge/s shall be based on the diminishing balance of the assistance.

A penalty at a rate of 3% per month, on the remaining balance shall be charged if full payment is not completed on the last scheduled payment date.

PROCEDURE IN THE GRANT OF PRODUCTION ASSISTANCE:

1. The EWs will conduct a pre-recruitment survey of prospective cooperators in their area of assignments and submit the same to the Supervising Agriculturist who shall prepare a consolidated list of farmers and submit the same to the CPD for verification in the Masterlist of farmers.

2. The Provincial Management Team shall validate the suitability of the farmers' area in collaboration with DENR/FTSD.

3. CPD shall inform BO whether or not farmers are registered. Unregistered farmers shall be required to fill up registration form through BO for them to be included in the Masterlist.

4. The FC shall accomplish/submit, with the assistance of NTA TPRO/Agriculturist, the following forms to the Branch Office (BO):
    a. Farm Plan and Budget (FPB) (RFEDPREI Form No. 1a);
    b. Application for Production Assistance by Individual FC (RFEDPREI Form No. 2);
    c. Promissory Note and Schedule of Payment (RFEDPREI Form No. 3)

5. The assisting NTA TPRO/Agriculturist shall review and validate the correctness of the entries in RFEDPREI Forms No. 1-3, before he/she submits to the Chief Agriculturist/Branch Project Officer.

6. The Chief Agriculturist/Project Officer shall review/verify all entries in the forms to assure that there is no fictitious or multiple enlistment of FCs within a cluster, prepare the Summary of Farm Plan and Budget of the Branch (RFEDPREI Form No. 4) indicating therein the name of the identified Cluster Leader (CL)/Farmer Leader (FL), and initials the documents then forward them to the Branch Manager.

7. The Branch Manager shall recommend approval/sign RFEDPREI Forms No. 1-4 and endorse all the aforestated documents to the Farm Technology and Services Department (FTSD).

8. The FTSD shall verify and review the Consolidated List of Production Assistance per Farmer Availee (RFEDPREI Form No. 4a) including all the attached documents, prepare the Summary of Farm Plan and Budget of all Branches (RFEDPREI Form No. 4b) and forward them to the Technical Coordinator of Branch Offices (TCBO). The TCBO shall recommend approval of documents and

forward the Summary of Farm Plan and Budget of the Branch (RFEDPREI Form No. 4) to the Finance Department.

9. The Finance Department shall certify to the availability of funds then forward all documents to the Office of the TCBO.

10. The TCBO shall recommend the approval of the Consolidated List of Production Assistance per Farmer Availee, the Summary of Farm Plan and Budget of the Branch (RFEDPREI Form No. 4) and forward them, including all the attached documents to the Office of the Administrator for approval.

11. The Administrator shall approve the documents then return them to the Office of the TCBO.

12. The Office of the TCBO shall receive the copies of the approved documents from the Office of the Administrator and distribute a copy each to the Finance Department and the Branch Offices.

13. The OTCBO shall prepare the voucher for fund transfer to the BOs and submit the same to the Finance Department for processing of fund transfers.

RELEASE OF PRODUCTION ASSISTANCE:

1. The BO Finance Unit shall prepare the Disbursement Voucher payable to the FC/CL/FL in an amount equivalent to his and his cluster members' actual requirement, attaching thereto the following documents:

   -Duly accomplished and approved Farm Plan and Budget

   -Approved Application Forms for Fuelwood Assistance of individual FCs.

   -Duly accomplished Promissory Notes and Schedules of Payment

   -Approved Summary of Farm Plan and Budget for Fuelwood Production Assistance and Consolidated List of Farmer-Cooperator.

2. The Branch Cashier shall release the check to the FC/CL/FL and signs Disbursement Voucher.

3. The CL/FL encashes the check and distributes his individual cluster members' share of the production assistance. Individual Cluster members acknowledge receipt by signing the corresponding CIV and payroll prepared for the purpose. Both the CIV and payroll shall be attested to by the Assisting TPRO/Agriculturist and certified by the Chief Agriculturist.

4. The individual FC proceeds to purchase the required inputs from the Input Supplier of his choice, and submit a duplicate/certified true copy of the Official Receipt (OR) corresponding to his purchase to the Assisting TPRO/Agriculturist, for initial control purposes.

5. The Assisting TPRO/Agriculturist shall submit all ORs, CIVs and payrolls to the Branch Cashier, maintains one copy for the Branch, and another copy submitted to the Internal Audit Service (IAS) and the FTSD, not later than two

weeks after purchase by FCs of inputs from the IS, for summary and consolidation.

Note: In case/s where the Farmer-Availee/s withdraws from the Project while the release of production assistance is on-going and replacement can no longer be recruited, the BO Manager should inform the Administrator's Office and the FTSD immediately for appropriate action.

However, if a credit-worthy replacement can be recruited instantly, the same should likewise be communicated to the AO and the FTSD, for immediate amendment of FPB and other supporting documents.

COLLECTION OF PRODUCTION ASSISTANCE, ADMINISTRATIVE CHARGE AND SERVICE FEES

1. Repayment of Production Assistance shall be based on the schedule of payment as provided in the RFEDPREI Form No. 3.

2. The Assisting TPRO/Agriculturist shall be authorized to collect the amortization on the basis of the Schedule of Assistance Repayments (RFEDPREI Form No. 7A and 7B). He/She shall issue to the FC a pre-numbered Acknowledgment Receipt (RFEDPREI Form No. 8) in duplicate.

3. The Assisting TPRO/Agriculturist shall maintain a record book registry of all Acknowledgement Receipts issued, recorded in chronological order.

REMITTANCE OF PRODUCTION ASSISTANCE PAYMENTS:

-The Assisting TPRO/Agriculturist shall remit to the Branch Cashier, all payments within 24 hours and submit RFEDPREI Form No. 9.

-The BO Cashier shall issue NTA Official Receipt in the name of the FC to the assisting TPRO/Agriculturist who shall distribute the ORS to the FCs.

-The Assisting TPRO/Agriculturist shall accomplish RFEDPREI Form No. 9 and submit to the Chief Agriculturist for validation.

-Collections made by the BO Cashier shall be deposited to LBP Account number 0232-1035-90 within 24 hours from receipt thereof.

SANCTIONS AND VIOLATIONS:

1. The following violations of FCs are punishable by Blacklisting:
    a. Using the cash portion of the production assistance for purpose/s other than its specified purposes;
    b. Not following the prescribed tree production technology;
    c. Non-payment of production assistance in accordance with pre-agreed term and schedule of repayments.

Management Take-Over. In the event that the FC is blacklisted during the implementation of the project, the NTA shall have the option to take over the project, in any or all of its aspect/s, and to sell the trees produce there from, deducting all expenses incurred, in the process.

2. Failure of the NTA TPRO/Agriculturist to remit collections, in accordance with the agreed schedule of remittances shall be subject to the following:
    a. 3% penalty/month from the date of collection;
    b. Administrative sanctions; and
    c. Restitution of unremitted collections

3. The following violations of NTA officials/staff/PMT, are punishable by administrative sanctions:
    a. Enlistment of fictitious FCs;
    b. Multiple enlistment of FCs in different clusters;
    c. Submission of fabricated/fictitious FPB;
    d. Submission of fabricated data on yield produce;
    e. Willful neglect to teach, guide, supervise and monitor the FCs under his/her care in the application of the prescribed tree production technology that caused the deterioration of the produce;
    f. Willful neglect to assist the FCs under his/her care in receiving, documenting and repaying of the production assistance;
    g. Failure to remit collection;
    h. Willful delay in responding to technical referral;
    i. Willful delay in the processing and approval of the required documents for the granting of production assistance; and
    j. Willful delay in the fund transfer to the BO.

PROJECT DOCUMENTATION AND MONITORING

The following reports are required to be submitted to monitor the progress of project implementation:

1. Monthly Reports

Reports using standard format shall be submitted to the FTSD on the scheduled reporting as specified in the form. However, special reports shall be required from the BOS as the need arises. This shall be communicated to the BO whenever necessary.

2. After Operation Report (AOR)

The need for a technical report (with discussion/write up) to generate quantitative and qualitative indicators like yield of produce, etc..

PROJECT MANAGEMENT TEAM

The National Project Management Team shall be responsible for providing the general policies and guidelines for the implementation of the project and will be composed by the following:

Chairman	:	Administrator
Members	:	Manager, Corporate Planning Department
		Manager, Farm Technology and Services Department
		Technical Coordinator for Branch Offices
		Manager, Internal Audit Service
		Manager, Finance Department
Secretariat	:	Farm Technology and Services Department Staff

The BO shall organize its Provincial Branch Project Management Team (PBPMT) which shall be responsible in the project implementation in their respective area of coverage. A special order shall be issued by the Branch Manager to this effect.

The Provincial Branch Project Management Team shall be composed by:

Project Manager	:	Branch Manager
Project Officer	:	Supervising Agriculturist
Administrative Officer		Administrative Officer/Cashier
Finance Officer	:	Accountant
Members	:	TPROs/Agriculturists