

MONEY CAN, INDEED, GROW ON TREES!

by

OSCAR A. GENDRANO, Forestry Specialist

ocagendrano@yahoo.com

1. In business, the “in” thing these days is going green. Environmentalists have urged: Reduce! Re-use! Re-cycle! Reduce fossil fuel emission; re-use empty boxes and containers. Invest in renewable biofuel! Reduce carbon footprint! Plant trees to absorb atmospheric carbon!
2. People know the many uses of trees: Shade against the searing sun; soil anchor; wood for baby cradles, houses, furniture and coffins. But few know that much profit can be derived from them, when systematically raised in plantations.
3. The country is blessed with a tropical climate that promotes the lush growth of plant life, of which timber trees are a climax vegetation. In decades past, the economy was propped up by massive cutting of timber found in our lush natural forests. Now, much of the natural timber is lost, due to mainly inept forest policies implemented in an era of connivance with, the corruption of, Government officials. Can we still protect whatever remains (now down to 800,000 hectares of virgin areas from six million hectares in 1980s)? Can we still regain the role that timber had as a major pillar of the national economy? The answer is a resounding: Yes!
4. Consider these facts:
 - a) There is so much land available, waiting to be planted to trees. Under the Community-Based Forest Management (CBFM) program, launched in 1996, about 1.6 million hectares have been given out to People’s Organizations (POs) in upland communities on long-term leases (25 years, renewable for another 25 years), for reforestation and livelihood projects. Although the CBFM program has been in place for 14 years, there is hardly any meaningful economic development in these areas.
 - b) In addition to CBFM areas, some 2.5 million hectares of upland largely degraded areas have been given back to cultural tribal minorities under the Indigenous People’s Rights Act (IPRA Law) signed into law in 1997. Through the years, many indigenous groups have laid claim to vast tracts of ancestral lands. But except for patches of food crops, not much economic activity has happened, and very substantial portions of the land are still being kept as traditional hunting grounds.
 - c) Through the past eight decades, Filipino foresters have gained much experience and expertise in raising timber trees. Government reforestation projects have been carried out in the entire country. As early as in the 1930s, Falcata (*Paraserianthis falcataria*) trees were planted in Impasugong, Bukidnon, and have now reached diameters of more than a meter, and heights of more than 20 meters. In the country’s four climatic zones (with different rainfall patterns throughout the year) many tree species have been tested. There is now a computer model to match species to local soil and climatic conditions. This process ensures that only species suitable for a zone should be raised, to ensure good growth.
 - d) A technology is now in use to grow superior trees (in trunk form and growth). The technique, initiated by and Oxford-trained Filipino forest geneticist, produces faster-growing trees (clones) that mature in 6-8 years, rather than the usual 10-12 years for seedlings produced from seeds. The maturing trees have good form and can grow a wood volume that is at least 100% more per hectare. Common reforestation trees, even when properly tended, can reach only 200 cubic meters per hectare in 10-12 years. Superior trees, produced through what is known as macrosomatic cloning, will grow at least 400 cubic meters in 6-8 years. The cloning technique is now in use for known fast-growing timber trees, such as *Gmelina arborea*, *Acacia mangium*, *Acacia auriculiformis*, Bagras (*Eucalyptus deglupta*), and *Falcata*. Three-year old plantings of these species have shown very promising results.

5. It is obvious that, if land, labor and technology are brought to a good mix with capital and managerial skills, profitable forest plantation ventures can be carried out in many parts of the country, where once the major economic activity was cutting down natural timber trees. An investor might shell out P200,000 per hectare to establish and tend a tree plantation. If 400 trees per hectare are planted and eventually attain a volume of 400 cubic meters of usable timber in eight years, the revenue flow (at current stump price of, say, P3,000/cu.m.) is about **five times** the invested capital. This revenue should compare well with that of many other business ventures.
6. True, there are risks to achieve such an attractive profit. The longer the wait for the trees to mature, the longer is their exposure to the danger of fire, disease, strong wind, and human encroachers. But there are risk-mitigating measures that can be carried out from the start of a project. Firelines could insulate a plantation from burning bush during summer. Buffer zones of quicker-growing trees (such as *Callandra spp.* and *Leucaena spp.*) could lessen the impact of strong winds. Due to their vigorous growth, clones, can resist many pests and diseases. Encroachers can be controlled by well-trained forest guards. A skillful forest manager is major a factor in having successful plantations.
7. Active participation of POs and the indigenous owners of forestlands, in forest ventures, will also help minimize risks. As stakeholders, they will have an economic interest that they will naturally protect. Their involvement in a project will, however, entail training in all aspects of the field operation, and in livelihood skills, to enable these people to be actively involved in ensuring the success of each venture.
8. When consumer demand for goods weakens, investors become extra careful, and tend to park their free funds in treasure chests and under mattresses. People with money to invest will soon realize, however, that a well-managed forest plantation that compounds its volume and value growth daily, maybe an attractive investment option. One advantage of a timber asset is that harvest can be postponed over a long period (e.g. 6-12 months) if demand is weak. Trees do not rot as quickly as vegetables or fruits.
9. In an impending environmental crisis due to a steady rise in global temperature, investment in growing trees should be favored by Government policies. No less than the chief scientist and 2007 Nobel Laureate (Dr. Pachauri) of the Intergovernment Panel on Climate Change (IPCC), declared that one of the best ways to fight drastic climate change is by planting trees. Forest researchers have determined that some fast-growing timber trees will absorb at least 20 tons per hectare per year of carbon dioxide from the atmosphere, as they build up wood tissue. This means that planting a million hectares could remove a hefty 20 million tons of carbon per year, from the earth's atmosphere as the trees grow. When these trees mature, and are harvested, about 15% of woody tissue are left in the stumps and root system. Tops and branches could be used as biofuel for power plants. The lumber is converted into furniture/construction items which preserve the carbon content. Vigorous coppice (sprout) growth from these stumps will continue to sequester carbon at an even faster rate.
10. Both the economic and environmental benefits of planting trees are easy to see. It is, therefore, only a matter of time when savvy investors recognize that putting money in growing trees will be both "green" and environment-friendly. The substantial revenue flow, compared to other ventures, will put a new and more realistic meaning to the saying that: "Money will grow on trees!"