



Vegetable agroforestry in the Philippines

The policy environment and incentives for small landowners

The vegetable-agroforestry system (VAF) is a viable farming entity that integrates vegetables in a tree-based system or vice versa. It offers multiple benefits, including provision of micro-nutrients to the diet of rural communities and enhancement of on-farm biodiversity and environmental sustainability. However, its viability is constrained by various factors, including farmers' inability to invest in the system, inadequate institutional structures to facilitate information flow, and lack of market incentives. Smallholders, who account for more than 90 percent of farmers and fisher folk, are financially constrained to invest in VAF system compared with large landholders. Thus policy incentives are needed to stimulate smallholder investments in VAF systems.

Incentives should go beyond merely providing technical information. They are most effective as a combination of direct and indirect measures. To determine the extent to which incentives exist for smallholders to invest in VAF, an intensive review of key national policies related to tree growing and vegetable production was undertaken (Tables 1 and 2). Local policies and perspectives of farmers and policymakers are also taken account in the discussion below.

Policy incentives and disincentives

For the tree sector, direct incentives were common from 1970s to 1980s, but these gradually shifted to more indirect ones such as comprehensive land tenure and resource use rights within forest areas. However, disincentives remained because of the investments required to develop large forest areas; the high transaction costs involved in harvesting and transporting logs or timber; and the uncertainty in future timber prices.

For the vegetable sector, policy incentives are largely framed within changing international trade regimes. While this has opened up international markets, smallholder producers are constrained by the high cost involved in meeting international standards. The challenge remains in removing policy and economic barriers not only at the level of local producers but through the entire value chain.

In general, the policy environment of tree growing and vegetable production is supportive of VAF but is insufficient in stimulating smallholder investments. Many policies have good intentions but are poorly implemented. The benefits of national-



level policies do not easily trickle down to smallholders. Large landowners tend to benefit more from these policies because they have more access to policy information and can leverage the associated costs of policy implementation.

While incentives for smallholders exist, disincentives persist, limiting the potential of smallholder investment in VAF. There are also gaps in policy implementation in terms of communication and funding. Many national-level policies are either not communicated or poorly disseminated locally. Smallholders also suffer from structural and funding constraints.

Finally, another issue is the weakness of national policies in addressing local specificities. National-level policies provide a general framework and enabling environment but are not able to fully address the complex, unique, and diverse conditions of smallholders.

Looking ahead

It is recognized that some issues are better resolved through national-level policies, while others can be effectively addressed locally. For the vegetable sector, issues on price regulation and control, commodity protection, value-chain expenses, non-tariff barriers, and global trade require national policy interventions. For the tree sector, issues on restrictive policies, transaction costs, land tenure and resource rights, and domestic and international market incentives should also be addressed through national-



Table 1. Tree growing	
Incentives	Disincentives
PD 705 (1975). Revised Forestry Code of the Philippines	
<ul style="list-style-type: none"> Ownership rights of planted trees Rights to sell, contract, convey, or dispose of planted trees Discounted fees, rentals, forest charges Tax exemptions and credits Free technical assistance Credit assistance and use of facilities Exemption from export log ban Market for timber products Unrestricted export of plantation products 	<ul style="list-style-type: none"> Minimum area that can be applied is 100 hectares for tree farming, 10 hectares for agro-forestry Lack of regular cash flow between planting and harvesting Uncertainties with future prices of tree products
LOI 1260 (1982). Integrated Social Forestry	
<ul style="list-style-type: none"> Grants and land tenure Priority in wage-based employment Extension and information services, community organizing Research and development support Share of forest income Exemption from forest charges Technical, legal, financial, marketing assistance and other 	<ul style="list-style-type: none"> Incomplete support system provided by government Farmers are unable to defray the initial cost of investment in forest areas
EO 263 (1995). Community-based Forestry Management	
<ul style="list-style-type: none"> Security of land tenure Right to use and manage forest resources Exemption from land use rental and forest charges Right to be consulted on government projects Authority to enter contracts Access to technical assistance Right to receive all incomes and proceeds of the area 	<ul style="list-style-type: none"> Many CBFM areas are either logged over or relatively forested, requiring huge capital to develop Inadequate technical and financial support during the initial stage High transaction costs involved in securing permits for harvesting and transporting Lack of support in marketing timber
DENR-AO 05-25. Upland Agroforestry Program	
<ul style="list-style-type: none"> Promotes equitable distribution of opportunities and income in developing agroforestry systems Encourages public-private partnerships 	<ul style="list-style-type: none"> Minimum area that can be applied is 50 hectares Farmers shall incur the cost of survey, including mapping and survey Farmers need to show proof of financial and technical capability to undertake agroforestry, e.g., credit lines from financial institutions

level policies. If addressed effectively, these will benefit not only smallholders but large landowners as well.

At the local level, promoting smallholder investments in VAF requires decisive policy actions in terms of improving the effectiveness of the extension system, with emphasis on improved technology provision and support for market linkages and infrastructure. We recommend that local government units (LGUs) be more proactive in developing incentive policies that complement or offset the weakness of national policies in delivering wider benefits to small farmers. LGUs have a better understanding of local contexts, hence policy interventions can be more realistic, and the policy performance can be closely monitored by local leaders. Nonetheless, policy linkages between national and local levels need to be established, and policymakers need to mobilize adequate responses at both levels.

Table 2. Vegetable production	
Incentives	Disincentives
PD 1467 (1989). Crop Insurance Law	
<ul style="list-style-type: none"> Protects agricultural producers against loss of crops and assets 	<ul style="list-style-type: none"> The insurance premium is too expensive for small farmers Compliance with requirements that are not easy to follow, e.g., following the cropping calendar Due to limited funding, the program focused on big farmers with formal credits through financial institutions Smallholders find it difficult to comply with credit requirements and procedures
RA 8178. Agricultural Tariffication Act	
<ul style="list-style-type: none"> Subsidies for irrigation Farm-to-market roads Training and extension services Post-harvest facilities Credit, other 	<ul style="list-style-type: none"> The entry of imported goods outpaced the production potential of small farmers Subverts policy support for smallholders, which is intended to protect their products
RA 8435 (1997). Agricultural and Fisheries Modernization Act	
<ul style="list-style-type: none"> Credit assistance to smallholders and fisher folk Promote research and development Training and extension services Information and marketing support 	<ul style="list-style-type: none"> Lack of stakeholder participation National government was unable to match the policy with necessary funding on the ground
RA 7900. High Value Crops Development Act	
<ul style="list-style-type: none"> Market development and promotion Infrastructure support Investment and financing Technology development, training and extension support Program advocacy, information networking and dissemination 	<ul style="list-style-type: none"> Requires huge investments. The only way to make this possible is to generate counterpart funds from local governments. There is no price regulation, stabilization, and control on many vegetable commodities; hence the market for high value crops is highly precarious.
DA-AO 25 (2005). Good Agricultural Practices (GAP)	
<ul style="list-style-type: none"> Product differentiation and premium price of crops Access to market-supply chain Stabilization of yield-revenue Reduction in wastage Increases in farm assets Protection against market externalities Subsidies and recognition Skills improvement 	<ul style="list-style-type: none"> Too costly for smallholders to meet GAP standards, e.g., use of new production techniques and more expensive environment-friendly inputs No assurance of international markets because of strict phytosanitary rules imposed by importing countries
EO 481 (2005). Organic Agriculture	
<ul style="list-style-type: none"> Puts premium value to organically produced agricultural products 	<ul style="list-style-type: none"> Insufficient supply of organic inputs, the price is very high for small farmers Tedious organic certification process Meeting standards means economic sacrifice for small farmers

More information

D. Catacutan, C. Duque-Piñon. 2007. The Policy Environment of Vegetable-Agroforestry (VAF) Systems in the Philippines: Are there incentives for smallholders? Research Report. World Agroforestry Centre: Bukidnon, Philippines. Forthcoming in: International Journal of Ecology and Development.