Vegetable-Agroforestry (VAF) system is a viable farming system that integrates vegetables in tree-based system, or vice-versa. The system provides multiple benefits, including provision of micronutrients 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. Policy incentives are thus needed to stimulate smallholder investments in VAF system.

Why smallholders? — Smallholders comprised a significant segment of the Filipino population, and are most vulnerable to rapidly changing economic, social, political and environmental conditions. Small farmers and fisherfolk account to over 90% of all farmers and fisherfolk, which is around 21% of the total labour force.

What are incentives and disincentives? — Incentives serve as motivation to accomplish a task that may lead to rewards, while disincentives are those that discourage, hinder or deter positive responses or actions to occur. In the context of VAF, incentives are considered elements of policy instruments that increase the comparative advantage of the system and thus, stimulate investments among smallholders.

### Policy Incentives and Disincentives

#### Tree Growing

**Presidential Decree 765 (1978) (Revised Forestry Code of the Philippines)**
- Incentives:
  - Ownership rights to planted trees
  - Rights to sell, contract, convey or dispose planted trees & other products
  - Discounted fees, rentals & forest charges
  - Tax exemptions & tax credits
  - Free technical assistance
  - Assured credit assistance & use of facilities
  - Exemption from export log tax
  - Market assurance for timber products
  - Unrestricted export of plantation products
  - Many farmers were discouraged, as they lack the capacity to develop large forest areas (a minimum of 100 ha, to convert into agroforestry) and tree farms, respectively. They also lack regular cash flow between planting and harvesting. There were also uncertainties with future prices of tree products.

**Integrated Social Forestry Program (ISFP) (1982)**
- Incentives:
  - Grants & land tenure
  - Priority or wage-based employment
  - Referral census to control migration
  - Extension & information services
  - Community organizing to ensure participation
  - R&D support
  - All income given to participant
  - Exemption from forest charges
  - Provision of technical, legal, financial, marketing and other assistance

**Community-Based Forest Management (CBFM) (1996)**
- Incentives:
  - Security of tenure
  - Right to use & manage the resources
  - Exemption from land use rental & forest charges
  - Right to be consulted on government projects in the area
  - Right to receive all income & proceeds of the area
  - Right to contract with private & government entities
  - Many of the CBFM areas were either logged over, grazed or, relatively forested, requiring huge capital to develop. The initial technical and financial support provided by the government was inadequate.

**Upland Agroforestry Program (UAP) (2005)**
- Promoted equitable distribution of opportunities and income in developing agroforestry systems.
- The disincentive is that the smallest area that can be applied should not be smaller than 50 ha. Farmers are also required to submit proofs of financial and technical capability to undertake agroforestry. They will have to incur the cost of surveying and developing agroforestry plans.

Policy incentive to tree growing had evolved from direct to indirect incentives. The provision of direct incentives was common from 1970s to 1980s but beginning 1990s, the notion on incentive gradually shifted to more indirect ones, such as comprehensive land and resource rights through various land tenure instruments.

#### Vegetable Production

**Crop Insurance Law (PD 1447) - Protected agricultural producers against loss of agricultural assets. The disincentive was the inability of smallholders to cash-out premium payment. Because of limited funding, it only focused on big farmers patronising formal credits with financial institutions.**

**Republic Act of 9178 on Agricultural Tariffication - Although it provided incentives (e.g. provision of irrigation, farm-to-market roads, post harvest facilities, credit, training and extension, etc.), it did not protect smallholders’ products.**

**Agricultural and Fisheries Modernization Act (AFMA)**
- Incentives:
  - Credit assistance to smallholders & fisherfolk
  - Promotes R&D
  - Extension services
  - Information & marketing support
- Many of the Strategic Agriculture Fisheries Development Zones Plan that LGUs developed did not materialise due to insufficient stakeholder consultation and were expensive to implement.

**Repub Act 7900 on High Value Crops Development (HVCD)**
- Incentives:
  - Policy reform, market development & promotion
  - Infrastructure support
  - Investment & financing
  - Technology development, training, extension & communication support
  - Program advocacy, information networking & dissemination
  - Good Agricultural Practices (GAP) (2005) incentives
    - Many of the initiatives are stated in this context, however, GA-HVCD requires huge investments, and the only way to make this possible is to generate counter-part funds from LGUs.

**Organic Agriculture (2006) - Promoted to put premium value to organically produced agricultural products. The potential economic and environmental benefits of organic farming are widely known to farmers, but poor farmers are unwilling to lose income when yields fall during the adoption of organic farming techniques.**

The disincentive to smallholders is the high cost across the market value chain. The challenge is removing the policy barriers not only at the local level of the producer, but within the whole vegetable enterprise.

### Conclusions

- The policy environment is supportive of VAF system but is insufficient in stimulating incentives for investments. Incentives for smallholders are limited, while disincentives persist.
- It is recognised that some issues are better resolved through national level policies, while a number of issues can be effectively addressed by locally-formulated policies.
- For the vegetable sector, issues on price regulation and control, commodity protection, reducing costs across market value chain, non-tariff barriers, and global trade require national level policy interventions.
- For the tree sector, issues on restrictive policies, transaction costs, land tenure and resource rights, and domestic and international market incentives are also to be addressed through national level policies.
- At the local level, promoting smallholder investments in VAF system requires stronger policy action in improving the effectiveness of the extension system, with emphasis on improved technology provision and support for market linkages and infrastructure.
- Policy linkages between national and local levels need to be established, and policy makers need to mobilise adequate responses at both levels.