Cassava is one of the important agricultural crops in the Philippines. It can be used as food and ingredients for feeds. It has also numerous industrial uses including starch, flour, and bio-ethanol. The demand of cassava for animal feeds and other industrial uses have substantially increased in the country. It can be grown in a wide range of agro-ecological conditions, grows best in easily drained and fertile soils. The crop is easy to grow and ready for harvesting at six months for food and at eight months for starch-based industrial use. There are 47 cassava varieties registered by BPI-NSIC for commercial production with a potential yield of as high as 50 metric tons (MT) per hectare.

In CY 2009-10, the cassava production’s national average yield was reported at 9.63 MT per hectare which is far below the potential yield of the different recommended varieties. Based on the production data, cassava yields are variable in the different growing areas. Due to differences in agro-ecological conditions, crop management, varieties planted, and adoption of the recommended cultural management practices.

Quality seed pieces of high yielding cassava varieties are not enough to support the needed planting materials for commercial production. At present, most production areas are still planted with old varieties of lower yield potentials. To cover more production areas for high yielding cassava varieties, massive propagation of quality seed pieces should be done.

Another concern is the insufficiency of post-harvest equipment and facilities especially mechanical/biomass dryers and chippers/granulators at the village level. Post-harvest facilities are important at the village level in order to reduce labor cost of processing and produce quality cassava chips/granules.

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Rationale

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Rationale

Several organizations have been working on the development of cassava for years. However, the increase in yield has not been realized. The objective of this paper is to present the progress made in the development of cassava for food and feed purposes. The paper will also highlight areas where further research is needed.

Objectives:

The program specifically aims to:
1. Increase cassava production from 2.1 million to 8.28 million metric tons (MMT) (fresh roots) by year 2016.
2. Increase average yield from 9.63 MT to 20.00 MT per hectare by year 2016.
3. Improve quality of cassava primary products;
4. Increase per capita consumption of cassava to 5 kilogram per year in 2015 and beyond.

Projected demand of cassava for the next six years

The demand of cassava for the next six years (2011-2016) is projected to increase with yearly increment of one MMT. Feeds got the highest share in the total demand followed by food, starch and bio-ethanol. The projected demand was established during the National Cassava Stakeholders Consultative Meeting held last October 2008 in Cagayan de Oro City.

Production targets

Based on the total demand of cassava for the next six years (CY 2011-2016), the program has set targets in terms of area harvested and root yield per hectare serve as to satisfy the requirements of the industry. These targets guide in the provision of production support services to all cassava stakeholders.

A. Production support services

1. Propagation of quality cassava seed pieces

Foundation seed pieces of registered cassava varieties are provided by Philippine Root Crops Research and Training Center (PhilRootcrops), Institute of Plant Breeding (IPB), and other breeding institutions. The DA-Regional Integrated Agricultural Research Centers (RIARCs)/ROS in coordination with the private sector conduct initial multiplication of seed pieces. For further multiplication produced seed pieces are distributed to accredited cassava seed pieces producers to assure sufficient supply of quality planting materials in the different regions. This scheme minimizes the transport cost thus, reducing the cost of planting materials.

B. Research and Development (R&D)

The R and D activities focus in the development of cassava varieties towards high yield and starch contented, development of integrated crop management and cropping systems specific to certain agro-ecological growing condition are done by State Colleges and Universities (SCUs) and other research agencies. The Bureau of Agricultural Research (BAR) funds shall be provided to projects that are in line with the priority concerns of cassava production.

C. Credit support services

Government and private banks and other lending institutions provides production and post harvest loans. Regional Cassava Focal Persons facilitate farmer groups’ loans not covered by private stakeholders.

D. Marketing development services

Market development activities are conducted to improve farmer-industry linkage, monitor prices and guide in the formulation of policies in cooperation with the producers, processors, traders and consumers. It includes strengthening of farmer organizations and linking producers to processors, service providers, and consumers. Private sector purchases cassava produce and primary products. Market chain of cassava primary products and other by-products shall be established.

E. Extension, Education and Training Services

1. Provision of trainings

Training on the improved cultural management practices of cassava production is conducted to all stakeholders in coordination with the Agricultural Training Institute (ATI), LGU’s, private sector and other training institutions. Target participants shall include the following but not limited to:

a. Private and LGU technicians
b. DA-regional technical staff/officers
c. Farmer-leaders
d. Individual cassava farmers
e. Other stakeholders

F. Regulatory Services

The Bureau of Agriculture and Fisheries Product Standards (BAFPS) in coordination with research institutions, processors, producers and consumers establishes quality standards of cassava chips/granules which serves as a basis in grading cassava chips/granules during purchasing.
G. Policy Formulation and Advocacy Services

Cassava production plan starts at the regional level as spearheaded by the Regional Corn Coordinator and Regional Cassava Focal Person with the participation of the private sector and other stakeholders in the region. All regional plans serve as basis in crafting the national production plan for cassava which will be reviewed by the members of the Cassava TWG and will be part of the Corn Program Annual Plan.

Policies and guidelines related to the implementation of R&D and support services for production are crafted by the Cassava TWG while policies and guidelines related to marketing and other production concerns are crafted by the PhilTaPP. Finalization of policies and guidelines is done with the participation of all cassava stakeholders.

The Regional Cassava Focal Person conducts monthly monitoring and evaluation of production areas and other production concerns. Production data from the region is reconciled with the data of the Bureau of Agricultural Statistics (BAS) and submitted monthly to the National Cassava Secretariat for consolidation. Consolidated national report is submitted to the National Statistics (BAS) and submitted monthly to the National Cassava Secretariat.

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