# THE PRIME MINISTER

No.: 124/QD-TTg

# **SOCIALIST REPUBLIC OF VIETNAM**Independence - Freedom - Happiness

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Hanoi, February 02, 2012

# DECISION APPROVING MASTER PLAN OF PRODUCTION DEVELOPMENT OF AGRICULTURE TO 2020 AND A VISION TOWARD 2030

THE PRIME MINISTER

Pursuant to the Law on Organization of Government dated December 25, 2001; At the proposal of the Minister of Agriculture and Rural Development,

#### **DECIDES:**

Article 1. To approve Master plan of production development of agriculture to 2020 and a vision toward 2030, with the following main contents:

#### I. PLANNING POINTVIEW

- 1. Planning of agricultural producing development (including agriculture, forestry, and fisheries) must follow the direction of improving productivity, quality, competitiveness, efficiency and sustainability of agriculture.
- 2. Planning of agricultural producing development must be based on innovation of thinking, market access in combination with rapid application of scientific achievements, technology, efficient use of natural resources of land, water, manpower trained and adaptation to climate change, protection of ecological environment in order to effectively exploit the advantages and natural conditions of each region, each locality.
- 3. Planning of agricultural producing development must be linked closely the production with industry of storage, processing, and consumption market; accumulation of land, forming the areas of concentrated goods production.
- 4. Planning of agricultural producing development must be associated with the conversion of labor restructure in agriculture and rural areas, population adjustment, along with trained manpower to meet the requirements of production of agriculture, forestry, fisheries, goods with the technical level and increasing technology.
- 5. Planning of agricultural producing development must have policy system to ensure a high mobilization of social resources, especially land, labor, forests and oceans, to promote the strength of international integration and support of the state.

#### **II. DEVELOPMENT OBJECTIVES**

# 1. The overall objective

To build up an agricultural of overall development in the direction of modernity, sustainability, large-scale commodity production on the basis of promoting the comparative advantages; applying science and technology to increase productivity, quality, efficiency and high competitiveness to ensure national food security in both the short and long term, to meet the domestic diverse needs and for export; improving the efficiency of land use, water, labor and capital; raising incomes and living conditions of farmers, fishermen, salt and forest makers.

# 2. Some specific targets

- a) The period 2011 2020
- The structure of agriculture, forestry and fisheries to 2020: 64.7% Agriculture, 2% forestry, 33.3% seafood.
  - GDP growth rate in agriculture, forestry and fisheries from 3.5 4%/year.
- The growth rate of production value in agriculture, forestry and fisheries from  $4.3\ to\ 4.7\%/year.$ 
  - The forest coverage reached 44-45% in 2020.
- Export turnover of agriculture, forestry and fisheries reached \$ 40 billion, including agriculture of \$ 22 billion, forestry of \$ 7 billion and fisheries of \$ 11 billion.
  - Output value per 1 ha of agricultural land is average at 70 million VND.
  - b) Vision toward 2030
- The structure of agriculture, forestry and fisheries to 2030: 55% Agriculture, 1.5% forestry, 43.5% fisheries.
  - GDP growth rate in agriculture, forestry and fisheries is average at 3 3.2%/year.
- The growth rate of production value of agriculture, forestry, and fisheries from 4 to 4.3% / year.
- Export turnover of agriculture, forestry and fisheries reached \$ 60 billion, including \$ 30 billion agriculture and \$ 10 billion forestry, \$ 20 billion fisheries.
  - Output value per 1 ha of agricultural land is average at 100-120 million VND.

# III. ORIENTATION FOR LAND USE PLANNING AND DEVELOPMENT IN AGRICULTURAL PRODUCTION ACCORDING TO LINES TO 2020 AND A VISION TOWARD 2030

#### A. Land use planning

- a) Reclaiming waste land to open more land of agriculture, forestry and aquaculture from 2011 to 2020 is about 1.1 million hectares, including 37 thousand hectares for planting rice, 60 thousand hectares for planting annual crops, 100 thousand hectares for perennial plants, 930 thousand hectares (ha) of planting forests.
- b) Land for agricultural production in 2020 is 9.59 million ha, reduced 580 thousand ha compared with 2010; to allocate land for planting annual crops 6.05 million ha, including 3.812 million ha of rice land, 300 thousand ha of land for plants of animal feed; 3.54 million ha of perennial plants.
- c) Forestry land to 2020 is from 16.2 to 16.5 million ha, increasing 879 thousand ha in 2010, including 8.132 million ha of forest production, 5.842 million ha of protection forest, 2.271 million ha of special-use forests.
- d) 790 thousand ha of aquaculture land, increasing 99.7 thousand ha compared with 2010, in which the area of aquaculture in the Cuu Long River Delta accounts for 70%.
- đ) Land for stable salt production is 14.5 thousand ha, in which production of industrial salt is 8.5 thousand ha.
  - 2. Food crops
  - a) Rice:
- Protection of stable rice land from 2020 is 3.812 million ha, in which rice of 2 harvest seasons or more is 3.2 million ha, applying in sync measures of advanced intensive production to achieve 41-43 million tons in 2020 and 44 million tons in 2030, ensuring food security and export.
- Processing of rice: To invest in industrial processing capacity reached 25 million tons/year, adequate capability of processing 60% of total paddy output. To comply with the technological processes in the production chain from procurement, preservative drying, milling, storage, circulation,

bringing rice recovery rate of more than 68%, reducing post-harvest losses of rice to 5 - 6%; improving exported rice quality: The proportion of 5-10% broken rice accounts for 70% output, the percentage of silver-white grains does not exceed 4%, the percentage of damaged grains shall not exceed 0.2%, yellow grains does not exceed 0.2%. By 2015, the added value of exported rice increases 10-15% compared to present due to the application of technical advance, improving of products quality.

- b) Maize: To expand the areas of maize by increasing the areas of winter harvest season in the Red River Delta, increasing the areas of land per a harvest season at the midland and mountainous provinces of the North, the Central Highlands. To stabilize areas after 2020 about 1.44 million ha, concentrated in the midland and mountainous provinces in the North, Central Highlands, North Central Coast, South East; intensive cultivation of maize to meet about 80% raw materials for processing industry of animal feed.
- c) Cassava: To Stabilize area of cassava of about 450 thousand ha in 2020, about 11 million tons of output for use as raw materials of animal feed and bio-fuels; use land with slope of less than 15°, more than 35cm thick concentrated primarily in the midland and mountainous provinces in the North, North Central Coast, South Central, Central Highlands, South East to produce.

# 3. Vegetables of all kinds

The area of land planned for about 400 thousand ha, bringing the land use coefficient to 2.5 - 3 times, increasing the area of vegetables for the winter harvest season on other land, to ensure the cultivated area reached 1.2 million ha, with output of about 20 million tons, including the midland and mountainous provinces in the North is about 170 thousand ha, Red River Delta is about 270 thousands ha, 120 thousand ha of North Central, South Central is about 80 thousand ha, 110 thousand ha of Central Highlands, South East is about 120 thousand ha, Cuu Long River Delta of about 330 thousand ha.

Vegetable production is aimed at improving quality, ensuring food safety, building concentrated vegetable production areas, applying high technology, manufacturing by the processes of Good Agricultural production Practices (VietGAP), organic.

#### 4. Soybean

Planned land area is about 100 thousand ha, utilizing the increase of harvest seasons on land for rice so that by 2020 the cultivated area is about 350 thousand ha with an output of 700 thousand tons; main production areas are the Red River delta, midland and mountainous areas of North, Central Highlands.

#### 5. Groundnut

Planned land area is about 150 thousand ha and on the land of groundnut – rice, to stabilize the cultivated area of about 300 thousand ha with an output of more than 800 thousand tons, main production areas are North Central Coastal, mountainous and midland areas of North, South Central Coast.

#### 6. Sugarcane

- The stable area of planning is about 300 thousand ha; in which the plants' material area is 220 thousand ha. To arrange four key areas of North Central of 80 thousand ha, South Central and Central Highlands are 53 thousand ha, the South East is 37 thousand ha, Cuu Long River Delta is 52 thousand ha. Focus on intensive cultivation, ensuring irrigation, using the breeds with hight yield, sugar reserve, putting cane yield in 2020 reached about 80 tons/ha.
- Sugar processing: Not to build more new plants, focus on expanding the capacity of existing plants, intensive investment, modernization of production lines to improve recovery yield and product quality; additional investment of refined sugar production to meet market demand. By 2020, total capacity of juice reached 140,000 TMN, sugar production reached 2 million tons meeting domestic consumption needs and be able to export.

# 7. Cotton

To develop the cotton to replace part of imported raw cotton fiber; by 2020 cotton areas reached more than 40 thousand ha and production of raw cotton fiber reached 50,000 tons. To develop the cottons of rainy season leaning on rainy water in the Central Highlands, South East, South Central Coast, the northern mountainous and midland areas. Focus on developing irrigated cotton by the drip irrigation method in the Central Highlands; by a system of drilled wells in the Central Coastal provinces; by irrigation systems in the provinces of Ninh Thuan and Binh Thuan.

#### 8. Tobacco

The stable planned area is about 40 thousand ha, meeting 90% of raw materials to the existing tobacco factories; to develop production mainly in the midland and mountainous areas of the North, Coast of South Central, South East, and Central Highlands.

#### 9. Plants for producing animal feed

Allocated land area is 300 thousand ha, increasing 260 thousand ha compared with 2010. The main production areas associated with large livestock husbandry areas are the midland and mountainous areas of the North, North Central, South Central Coast, South East, and Central Highlands.

#### 10. Tea

- Land area allocated stably in long-term is 140 thousand ha; increasing 10 thousand ha compared with 2010, in which the midland and mountainous provinces in the North are about 7 thousand ha, Lam Dong 3 thousand ha. To apply the clean tea manufacturing processes; ensure hygiene and food safety, use of new varieties of tea with high quality and productivity for new planting and replanting.
- Processing of tea: Newly invest and upgrade the tea factories in the direction of modernization with the total capacity of 840,000 tons of fresh bud/year; 70% of industrial processing of fresh bud tea production, with output of 270,000 tons of dry tea. To convert the product structure in the direction of 55% black tea and 45% green tea; by 2020 exported tea prices of Vietnam equal to the average world price.

#### 11. Coffee

- Allocated land area is 500 thousand ha, including tea and coffee areas are about 60 thousand ha; the main production areas are in the Central Highlands, South East, North Central Coast.
- Coffee Processing: In the forms of economic cooperation between enterprises and farmers, to increase the percentage of coffee processed at an industrial scale from 20% in 2010, up to 40% by 2015 and 70% in 2020; and correspondingly reduce the rate of processing of grain coffee, raw coffee in households scale from 80% to 60% in 2015 and 30% in 2020; to increase rate of wet-processed coffee from 10% of output in 2010 to 20% by 2015 and 30% in 2020; expand the processing scale, capacity of coffee powder, instant coffee from 10,000 tons in 2010 to 20,000 tons in 2015 and 30,000 tons in 2020.

#### 12. Rubber tree

- To keep steady the aim to stabilize the area of 800 thousand ha and orient planning in areas as in the Decision No.750/QD-TTg dated June 03, 2009 by the Prime Minister on approving the planning to develop rubber to 2015 and a Vision toward 2020. After 2015, on the basis of evaluating the effectiveness of rubber area planted and the land fund of the regions to consider adjusting the rubber acreage scale properly, efficiently and sustainably.
- Rubber processing: In 2015, total processing capacity is about 1.2 million tons of dry latex/year. By 2020, the total processing capacity is about 1.3 million tons of dry latex/year. To innovate technology, create a reasonable product structure, including latex SVR 3L, SVR 5L accounts about 40%, 20% of cream latex, technical rubber latex RSS, SR and SVR 10, SVR 20 accounts about 40% to enhance the value of export.

From now to 2020, it must make further investment in processing capacity of 500,000 tons of dry latex/year. For large-land planted rubber, the factories have capacity from 6,000 to 20,000 tons/year; for small-land planted rubber, the factories have capacity from 1,200-1,500 tons/year; for the factories that were constructed, they should be continued to upgrade, complete equipment, and synchronize lines. To comply with the technical processes and manage, perform the quality control of exported rubber.

To build up the factories of producing tires of automobiles, motorcycles ..., putting the proportion of latex used domestically up to at least 30% in 2020.

#### 13. Cashew

- Allocated land area is 400 thousand ha, continue to plant newly from now until 2020 about 20 thousand ha, mainly use unused land; the main growing areas of cashew are Central Highlands, South East and South Central Coast.
- Processing of cashew: To diversify cashew products to raise the rate of cashew cores processed at least 40% under the forms (cashew nuts roasted with salt, cashew nuts with butter, cashew nut filling of candy ...); and increase the rate of domestic consumption to avoid the risk due to negative affect of the export market, on the other hand using thoroughly cashew cores to be broken because of application of mechanization for replacing manual labor.

# 14. Pepper

- To stabilize 50 thousand ha as in present, mainly planting areas are the South East of 26.8 thousand ha, 17.8 thousand ha in Highlands, North Central of 3.7 thousand ha, Coast of South Central of 1.2 thousand ha, Cuu Long River Delta of 500 ha.
- Processing of pepper: To invest in innovating, upgrading the existing processing factories, of which there are 14 factories ensuring advanced processing techniques of high quality, food safety. At the same time, to invest in capacity expansion and newly invest in the processing plants of white pepper, increase the percentage of white pepper products from 19.4% in 2010 to 30% in 2020. To invest in increasing the percentage of crushed powder pepper products from 12.2% in 2010 to 25% in 2020.

# 15. Coconut

To stabilize the area of 140 thousand ha, the main production regions are the Mekong River Delta, Central Highlands, South East and South Central Coast.

#### 16. Cocoa

Allocated area is about 50 thousand ha; the main production regions are the Mekong River Delta, and South Central Coast.

#### 17. Fruit trees

- Allocated area is about 910 thousand ha in which there are 810 thousand ha of major fruit trees such as leeches of 140 thousand ha, longans of 140 thousand ha, bananas of 145 thousand ha, mangoes of 110 thousand ha, oranges, mandarins of 115 thousand ha, Pineapples of 55 thousand ha. The main planting areas are the northern mountainous and midland areas of 200 thousand ha; Red River Delta of 80 thousand ha, 70 thousand ha of North Central, South Central Coast of 30 thousand ha, 30 thousand ha of Central Highlands, South East of 145 thousand ha, Cuu Long River Delta of 350 thousand ha.

Production of fruit trees must be directed towards expanding of the application of good agricultural production practice (VietGAP), ensuring hygiene, and food safety.

- Processing of fruits: To increase capacity and efficiency of the existing processing plants (currently only reached 30% of the entire industry design). The main processed products include the fruits frozen, canned, fried, natural juices, juice concentrated, frozen; focusing on the types of products frozen, fruit juice concentrated (pineapples, lychees, Lac Tien, mango concentrated). To increase the preservative capacity, reduce post-harvest losses in both quantity and quality from 25%

in present down to less than 15% within 10 coming years; Apply science and technology to prolong harvest season of fruits, the advanced preservation measures, methods of radiation, sterilization with hot water for fresh export of major fruits (dragon fruits, leeches, mangoes, longans, pomeloes, rambutans ...).

#### 18. Livestock husbandry

To develop cattle and poultry in the direction of farm breeding, industry, semi- industry associated with the establishments of slaughtering, processing, and treating waste to ensure food safety, environmental hygiene.

- a) Planning of breeding animal flocks:
- Pigs: To focus on development of the pig flocks suitable to domestic consumption. Development of raising high-quality pigs in some areas with advantages such as the Red River delta, northern mountainous and midland areas, South East in the direction of industrial production, ensuring epidemic disease safety, food hygiene for consumption and export. The total flocks of pigs in 2020 reached 34 million pigs; output of living pigs is about 4.8 to 4.9 million tons.
- Buffaloes, cows: To develop buffalo flocks primarily for meat, the number of buffaloes in 2020 reached about 3 million buffaloes, the main breeding areas are mountainous and midland provinces of North and North Central Coast.

Development of beef cows herds with high yield, good-taste beef, meeting domestic consumption demand, bringing the beef cows in 2020 reached about 12 million cows, with output of living beef cows of about 650 thousand tons; expansion of dairy farming areas in the urban surroundings with conditions and some areas having the advantages, raising dairy herd in 2020 up to 500 thousand dairies.

- Poultry: Poultry development in the direction of concentrated raising with appropriate scale to meet demand for domestic consumption; initiative control of epidemic disease aiming to control the bird flu. Poultry herd in 2020 reached about 360-400 million poultries and a yield of living poultry of from 2 to 2.5 million tons and 14 billion eggs.
- b) Slaughtering and processing: To build up the establishments of slaughtering cattle and poultry in the direction of concentrated industries, networks of distributing fresh meat and processing industrially to ensure food safety and protection of environment. By 2020, total production of living cattle and poultry (mostly pork, poultry, and beef) is 7 million tons, equivalent to 5 million tons of meat. The rate of cattle and poultry slaughtered, processed industrially compared with the total meat output reached more than 35%, about 2 million tons; in which industrial processing accounts for 25%, about 500 thousand tons.

#### 19. Forestry

- a) To allocate forestry land area by 2020 from 16.2 to 16.5 million ha; increasing about 879 thousand ha compared with 2010, of which 8,132 million ha of production forests, 5,842 million ha of protection forests, 2,271 million ha of special-use forests.
- Protection forests: to allocate 5,842 million ha mainly as the critical levels; including 5.6 million ha of upstream protection forests; 0.18 million ha of protection forests against waves, invading sea; 0.15 million ha of protection forests against wind, sand; 70 thousand ha of forests for environmental protection for the large cities, industrial zones and protection forests of borders and islands.
- Special-use forests: to strengthen the existing forest system of 2.14 million ha in the direction of improving quality, biodiversity value, ensuring to meet the criteria of forest quality. For the forests having no or having little ecological systems, it should develop a few new areas in the mountainous areas of the North, North Central, Central Highlands, and wetlands in the Northern and the Southern Delta, with an area of about 60 thousand ha.
- Production forests: to allocate about 8,132 million ha, increasing 735 thousand ha compared with 2010; in which includes 125 thousand ha of protection forests transferred as planned,

620 thousand ha of poor natural forests required to recover, regenerate, and plant newly around 610 thousand ha on forestry land not yet used.

b) Processing: to reorganize wood processing industry to balance between production capacity and stable supply of materials. From now to 2015, focuse on reviewing and strengthening and upgrading the system of forest products processing factories of small and medium scale and industrial development of forest product processing of large scale after 2015.

To build up and expand the forest products processing industry zones in the areas likely to provide enough raw materials, stably, convenient in infrastructure to ensure profitable and competitive on the regional and international market; to encourage the construction of facilities of producing and processing in general planted timber and non-timber forest products and to boost the processing of man-made planks and pulp, reduce gradually processing and export of woodchip.

By 2020, the total capacity of sawn timber reached 6 million m3/year; woodchip board reached 320 thousand m3/year; MDF of 220 thousand m3/year; value of exported wood products reached \$ 7 billion (3.5 million m3 of products), non-timber value of forest products reached about \$ 0.8 billion.

#### 20. Fisheries

a) Aquaculture: The land area allocated to aquaculture in 2020 is 1.2 million ha, of which, using unused coastal land for aquaculture about 7 thousand ha and from transformation of lowland of planting rice into 90 thousand ha. To construct the industrial farming zones with major objects such as cat fish, shrimp, white shrimp, krills, sea fishes, and tilapia.

To stable the areas of freshwater aquaculture with the traditional fishes in the rural areas to meet consumption demand in the region, create jobs, increase incomes for farmers. Focus on implementation of raising industrially catfish; transfer the application of VietGAP standards into GlobalGAP standards. To convert a number of areas of one crop season rice land in the waterlogged areas in the Cuu Long River Delta, the Red River Delta for farming shrimp and fishes.

For aquaculture in brackish water, planning to form the areas of concentrated industrial aquaculture of larger scale according to GAP standards appropriate to each market, create much production of goods for export and domestic consumption in the regions of Red River Delta, Central Coastal and Cuu Long River Delta associated with their origins, building up of fishery brand name of reputation and high quality.

For salt water aquaculture, to plan the areas of concentrated mariculture in association with the facilities of producing aquatic varieties in the areas; expansion of the areas of aquaculture on the sea and the islands.

- b) Exploitation and protection of fishery resources: Continue to invest in research and survey of resources, fishing forecasting for exploitation of marine resources. Reorganize the fishery exploration in the direction of modernization of the fisheries management on the basis of restructuring vessels, lines consistent with the sea, with the natural environment, fishery resources associated with investment in upgrading and modernization of fishing ports, fishing landing stage, the anchorage areas to prevent storm, the areas of logistics for coastal fisheries and on the islands; to expand mining activities within the framework of international cooperation outside Vietnam's sea; to build and develop the system of marine preservative areas and conservation of inland waters.
- c) Processing of fisheries: volume of exported goods reached 1.55 million tons in 2015, reached 1.9 million tons in 2020; increasing processing capacity from 6.5 thousand tons/day to 10 thousand tons/day; cold storage systems of fisheries increase 630 thousand tons to reach the total capacity about 1.1 million tons.
- For frozen processing: To replace the outdate, old equipment, especially the refrigeration equipment using refrigerants destroying the ozone layer required to be removed all from now to 2030; investment in depth is the majority to produce more value-added products and raise using capacity to 70% compared with 40-50% as in present. For Cuu Long River Delta, up to 2015, it needs to build newly catfish processing plants with an average capacity of 7.5 thousand tons/year meeting the

amount of catfish increased to 1.5 million tons in 2015 and increase the capacity of existing factories at that time for processing 2 million tons of catfish in 2020.

- For the processing of fish power: Do not encourage the development of processing capacity, focus on improving capacity of utilization up to 70% in northern and central regions.
- For the processing of dry goods: To reduce production of dry goods of low quality, increase production of high added-value goods, increase quality of dried goods exported and keep the stable output of 30 thousand 40 thousand tons/year.
- For the processing of canned goods: to raise the level of capacity utilization up to 80-90% by importing raw materials of tuna, herring, octopus ....Diversify canned goods, increase the volume of provision to the domestic market and export.
- To build more large cold storage systems to store products overcoming the seasonality, for market regulation and for shipment.
- d) Mechanization in repair of boats, vessels and fishing logistics services: to focus on investment, strengthening and development in sync of the mechanical industry, building and repair of fishing vessels; and auxiliary production associated with the building of logistics services infrastructure for operation, aquaculture and processing of fisheries.

#### 21. Salt

To allocate stably salt the salt production area of 14.5 thousand ha with an output of 2 million tons of which 8.5 thousand ha with an output of 1.35 million tons. Investment in modernizing industrial salt production in the areas having conditions, the advantage in the direction of large scale concentration to produce high-quality salt, in association production with processing and chemicals after salt, meeting raw materials for the chemical industry and domestic salt consumption towards the export of salt.

#### IV. SOME KEY SOLUTIONS

- 1. To raise awareness, focus on directing the construction and implementation of industry development planning in the market economy.
- To strengthen the management, monitoring of the implementation of planning to ensure oriented and sustainable development of industries. The localities must raise awareness on the importance of the planning of agriculture sector in the area; direct and guide the agricultural sector and related branches to implement effectively contents of planning suitable to the specific conditions of the locality.
- To develop programs of economic development, investment in construction of infrastructure, industrial systems of processing and consumption markets from the central governments to the localities, ensuring the necessary and sufficient conditions for the implementation of the approved plans.
  - 2. Market development and trade promotion for the implementation of planning objectives
- a) Good implementation of the ASEAN commitments in the sectors of agriculture, forestry and fisheries, particularly as food security, veterinary medicine, plant protection, fisheries and forestry; with WTO on animal and plant quarantine, the investment and service; the Agreements on protection and quarantine of plants and animals, veterinary medicine for the countries importing agriculture, forestry and fisheries of Vietnam and facilitate implementation of planning of production development including inputs and outputs.
- b) To develop and implement programs of trade promotion of agriculture, forestry and fisheries, maintaining the traditional, large market (China, EU, Japan, USA, Philippines, Indonesia, Iraq ...) and extend the markets in Eastern Europe, Middle East, Korea ... to promote consumption of agricultural products.

- c) To support and facilitate the enterprises to build up brand names and quality standards of products of agriculture, forestry and fisheries of major export; to meet the requirements of quality, design and specifications of the importing countries.
- d) To develop and expand domestic market, especially the tourist areas, urban centers, large residential areas.
- đ) The localities guide the enterprises to plan, invest in the zones of raw materials, sign the contracts of consumption of products with producers, creating a stable source of goods for processing, and export.
  - 3. Research, transfer of science and technology and human resource training
- a) The State ensures to prioritize budget investment capital for research, transfer of science technology, corresponding to the task of developing agriculture, forestry, salt production, and fisheries in accordance with the approved plans.
- b) To enhance cooperation with the countries in the region and the world of science and technology in production, prevention, and combat of epidemic disease, preservation, processing of agro-forestry and fisheries; exploitation of aquatic products, mechanic of building ships, ship machine, establishment of the information system of marine fishing management.
- c) To continue renewing policy of science, technology, enhance socialization on research, transfer of technology; to renew treatment policy in the direction of encouraging and promoting the resources of science and technology, attract the economic sectors involved in research and transfer of technical advances.
- d) To strengthen the capacity of the system of promotion of agriculture, promotion of fisheries; the system of plant protection, veterinary medicine, quality management system of agriculture, forestry and fisheries, and other services for production of agriculture, forestry and fisheries.
- d) To improve the capacity of technicians, management and implementation of vocational training socialization to ensure farmers in access to new technologies to apply to the production and exploitation of natural resources, use of equipment and machinery into production, storage, processing and consumption of products.
- 4. Infrastructure development to meet the development requirements of production of agriculture, forestry, salt production, and fisheries as planned.

#### a) Irrigation

To develop irrigation in the direction of modernization and increasing efficiency of water supply for production and life; proactive prevention, combat and mitigation of damages caused by natural disasters, gradually adapt to climate change conditions. To ensure adequate water resources for the effective exploitation of 4.5 million ha of annual cultivated land (of which there are 3.8 million ha of rice land), proceed to irrigate actively for 100% area of 2 crop-seasons rice land. To improve capacity of irrigation for the areas planting perennial industrial trees, concentrated fruit trees, water supply for aquaculture of 0.79 million ha, of which 80% of aquaculture areas water-supplied initiatively; to improve the ability of drainage to the main rivers, ensuring water drainage for the delta regions, low-lying areas with a design frequency of 5-10%, with the solution of works to adapt to climate change.

To concentrate investment in upgrading the existing irrigation systems; to invest thoroughly for each system, upgrade and modernize the key works, canals, equipment of control and operation to promote the design capacity and improve the service capacity.

To continue investment in the construction of small irrigation works in the upland and remote areas, borders and islands for water supply for irrigation and living. To develop irrigation for aquaculture, industrial activities, living and improving the environment in coastal areas. To invest in construction of large works for flood regulation and tide control, prevention of saltwater infiltration, freshwater reservation, drainage, limitation of the impact of climate change and sea level rise.

To develop the organizations that use water of farmers; build up the mechanisms of protection, management, and efficient operation of irrigation systems and saving water, to improve efficiency to use design capacity of the works already had.

#### b) On rural roads

To implement the planning of system for linking rural roads with the provincial roads and national highways aiming to the objectives of promoting the development of production, commodity circulation.

To prioritize the construction of roads in the highlands and mountainous areas, especially in the districts and communes with poverty rates above 50%, guaranteed until 2020, the transport systems corresponding to the other areas to facilitate development of commodity production.

To expand the transportation system to the hilly regions, creating conditions for development of industrial zones, new urban centers without affecting specialized agricultural land.

# c) Regarding to the fisheries infrastructure

To plan, build technical infrastructure of stations, farms and infrastructure for the farming areas, including embankments, first grade channels of water supply and drainage, sewers and major pump stations; to invest in the Centers of observation and environmental warning of the major aquaculture areas; to invest in the system of storm shelters, including both regional and local levels; to upgrade, expand and build newly the system of fishing ports and essential logistics facilities to ensure fishing activities in the key fishing grounds.

# d) Regarding to agricultural infrastructure

To invest in improving capacity infrastructure systems of scientific and technological research, especially selection, creation, production of seeds, breeds of domestic animals; and plant protection, veterinary medicine, seed quality control, fertilizers, agricultural products.

# d) Regarding to the forestry infrastructure

To develop the system of forest roads in the remote areas and areas of ethnic minorities; to invest in improving capacity of the system of the facilities researching on silviculture, breeding forests and national nurseries; disaster warning of multiple objectives such as warning of forest fires and floods combined with measurement of meteorological data.

# e) Development of infrastructure for trade

To develop the post office system, phone system, communal cultural post offices reached 100% in 2020; and the ratio of rural population to be accessed to the internet is 30%.

The State facilitates and supports the communes to build, invest in development of the system of wholesale markets of agriculture, forestry, fisheries, the border markets, the regional markets according to the plan approved by the Prime Minister; to invest in wholesale centers in the concentrated regions of agriculture, forestry, fisheries, and goods.

- 5. Continue to renovate and build the organizational forms of production, services in the rural areas
- a) To create conditions for households economy to develop commodity production in the direction of expanding farm size; to support poor households and gradually to eradicate poverty and gradually enrich; to encourage the development of linking farmers with the enterprises, cooperatives, scientific organizations, trade associations in the production and products consumption.
- b) To implement the policies to promote rapid development of economic cooperation, private sector, especially small and medium enterprises in rural areas, to facilitate investment in production according to attached-to-market planning.
- c) To complete basically the conversion of enterprises to equitized companies, especially the enterprises of agriculture, forestry associated enterprises' interests with the interests of farmers,

actively invest in construction of material areas according to planning and guide farmers to produce according to market requirements.

# 6. Regarding to land

- a) To organize the good implementation of management and use of rice land in accordance with provisions of the law on land to ensure national food security.
- b) To develop mechanisms and policies to encourage farmers to contribute their share by value of land use rights to participate in the enterprises, the business investment projects.
- c) To continue to implement quickly the assignment of land, forest in forestry and the policies to encourage community of villages, communes, people to participate in protecting natural forests and economic forest development.

#### 7. Agricultural mechanization

- a) Mechanization is an important solution to develop agriculture. Striving to 2020, the rate of mechanization in the stage of preparing soil increased from 70% in 2010 to 95%; stage of cultivation, fertilization from 25% to 70%, harvest stage from 30% to 70%, processing stage from 30% to 80%.
- b) To develop policies to encourage investment in manufacturing motors, cultivation machines for producing agriculture, forestry, fisheries, salt with reasonable prices. To expand production in the direction of cultivation specialty, concentration forming the large fields in order to create conditions for farmers, enterprises, organizations of producing agriculture, forestry, fisheries and salt to quickly apply mechanization to the stages of production storage processing transport and consumption of products.

#### V. ORGANIZATION OF IMPLEMENTATION

- 1. Ministry of Agriculture and Rural Development shall
- Guide the localities to review and build planning of production development of agriculture, forestry, salt and fisheries.
- Complete expeditiously the report of strategic, environmental impact assessment for submission in accordance provisions.
- Strengthen capacity of branch's information systems to provide timely the necessary information on the production, prices, market for the producing facilities and people to invest in production as planned.
- To evaluate and approve the planning of production of agriculture, forestry, salt and fisheries of the areas.
- To organize and direct the implementation of overall planning of development of agriculture, forestry, salt and fisheries of the whole country.
- 2. Ministry of Planning and Investment: On the basis of planning, investment projects have been approved by the competent authorities to balance and allocate capital for investment in development of agriculture and rural areas every year as planned.
- 3. Ministry of Finance: to ensure the financial policies for the implementation of the overall planning of agriculture, forestry, salt production and fisheries.
- 4. The other ministries and branches: According to the functions, tasks, to participate in, create conditions for the localities, organizations, households and individuals to implement the planning.
  - 5. People's Committees of provinces and cities directly under the central government shall
- a) Review, build planning of agriculture, forestry, salt production, fisheries of their localities; to organize implementation of the approved plan.

Guide the districts, townships, provincial cities and communes and towns to build planning of producing agriculture, forestry and fisheries.

b) Develop the programs and projects to develop the key sectors of their localities and implementation.

# **Article 2. Implementation provisions**

- 1. This Decision takes effect from the date of signing.
- 2. This Decision replaces Decision No.150/2005/QD-TTg of June 20, 2005 by the Prime Minister on approving the planning of conversion of production structure of agriculture, forestry and fisheries of the whole country to 2010 and a Vision toward 2020.
- 3. The ministers, heads of ministerial-level agencies, heads of Governmental agencies, President's Committee of provinces and cities directly under the Central Government shall implement this Decision./.

FOR THE PRIME MINISTER DEPUTY MINISTER

**Hoang Trung Hai**