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1 INTRODUCTION

Context

The Government of Vietnam (GoV) has decided to carry out a public expenditure review and integrated fiduciary assessment (PER-IFA) to review policies and management on public expenditure and thereafter map out measures to ensure that the public expenditure programs support for development objectives and priorities in a most effective way. Apart from general review, PER-IFA selected four (4) sectors (namely Agriculture and Rural Development, Education, Health and Transportation) and four (4) provinces for detail review. Ministry of Finance (MOF) is a focal point of PER-IFA in general with active participation of Provincial People Committee (PPC), in-line Ministries and donors, particularly the World Bank (WB).

PER-IFA for Agriculture and Rural Development is one of the four (4) studies of the sector. Besides from general objectives of PER-IFA, PER-IFA for Agriculture and Rural Development is also aimed to strengthening capacity for analysis public expenditure of Ministry of Agriculture and Rural Development (MARD), providing inputs for setting up the State Budget for 2005 and testing a Medium Term Expenditure Framework (MTEF) of the Agriculture and Rural Development sector in the coming period.

Scope

This review focus mainly on MARD and provincial expenditures in term of similar aspects. Some items of the public expenditures of programs of other concerned Ministries that relate directly to Agriculture and Rural Development, PER focus on analyzing some key agricultural sectors such as irrigation, agriculture, agricultural extension and forestry.

Reporting

The Public Expenditure Review of MARD may help leaders of the Ministry to review issues related to management and analysis of public expenditure in order to achieve better results in management and operation. Additionally this is also a basis for donors to refer to make their own donation decisions.

The review presents an overall picture in term of intense and general trends in public expenditures and their sources of the Agriculture and Rural Development Sector, together with classification according to objectives of use, economic contents, budgetary levels (central, provincial, and regional levels), accountability, institutions, etc. in relation with criteria on output and efficiency. On other hand, the review also focus in depth on analyzing the sector's public expenditure policies, implementation and management, including impacts of public expenditure decentralization to public expenditure programs of MARD focusing on public agricultural services provision (e.g. agricultural extension). Finally, the review also proposes some recommendations to the Ministry of Agriculture and Rural Development and other concerned Ministries.

Implementation

The review is developed by an Editorial Team of the Finance Department of MARD, in cooperation and consultation with international and national consultancy experts, and discussed in a meeting for comments with participation of Departments of MARD, some Ministries, international and national consultants, and other international donors. Due to a time limit, the review has not reflected fully assessments on public expenditure of MARD.

2 OVERVIEW

2.1 Agriculture in the national economy

The Agricultural and Rural Development Sector plays an important role in the national economy:

Vietnam with its long and narrow shape has an inland territorial area of about 330,900km2. Approximately two third (2/3) of its territory is mountainous and hilly. The country has a dense river network, of about 2,360 rives and streams with length of more than 10 km, of which big rivers accounting only more than 8%. Vietnam has two big and fertile deltas: the Red River delta in the North and the Mekong river delta in the South. There is a chain of small or big deltas, locating along the Coastal Central area from Thanh Hoa to Phan Thiet provinces between these two deltas. With a jointly residing of 54 ethnic groups, Vietnam is a narrow country with a huge population and fast population growth[1]. More than 80% of the population and 90% of the poor are living in the rural area and agricultural production is their main living source.

Since 1980s upwards, Vietnam is a poor and backward agricultural country with underdeveloped economy and often import of food. Thank to the launch of the Innovation policy, for almost 20 years, the agricultural sector has contributed to approximately one fourth of GDP of the entire country, creating one third of the value the total exports and jobs for two third of the labor force. Comprehensive reform including that in agricultural sector have resulted in high and widespread economic growth, namely the economic growth rate of 7% and the agricultural GDP growth rate of 4%. Thank to intensive implementation of irrigation, land reclamation, crop extensions, new seed application and other agricultural promotion policies of the Government, the agricultural sector has turned Vietnam from a food importing country in the middle of 1980s to the second exporter of rice and been ranked as one of the five leading exporters of other agricultural products (coffee, pepper, cashew nuts, and aquaculture products) in the world.

Achievements in agricultural and in rural areas have made significant contributions for Vietnam to overcome difficult periods and to stabilize economic, political and social conditions, national food safety, to protect most of the natural resources and ecological environment for the country, and to be a large market for industrial sectors. Obvious improvements have been seen in income and living standards of the majority of farmers. Though the period of 1998-2002 saw a lower growth rate, the income per capita in rural areas still experienced the growth rate of 3% per annum, from 2.166 million VND in 1998 to 2.447 million VND in 2002. The rural poverty rate has reduced from 45.5% in 1998 to 35.6% in 2002 and the rural hunger rate (the food poverty rate) is only 11.9% in 2002[2]

2.2 Results of the performance of the agricultural sector

Achievements:

Thus, over the past few years (1998, 1999), although the economy has slowed down, the agricultural sector has managed to perform well with an average growth rate of over 40%. Food production output has increased rapidly, national food security is secured, as such; agricultural income has increased by 61% from 1993 to 1998 and thus become a main source of poverty reduction in rural areas.

[1] Approximately 2%/year
[2] According to the 2002 household living standard survey by the General Statistics Office

During the period of 1999-2002, the agricultural sector continues to experience rapid and comprehensive development. The 1996-2000 value added growth rate per annum is 4.55%. The results of production and business have been on the increase, in which the value of production and plantation is up by 12.2% and animal husbandry up by 22.28%, more importantly; steady rice production growth has been maintained.

Structure of the agricultural sector continues to experience changes in term of diversification and more efficiency: Development of highly marketable, economic valued trees and cattle, and development of non-agricultural occupations. Till now, many agricultural products (rice, coffee, rubber, pepper and cashew nuts) have become leading export products of Vietnam, and occupied important positions in the world market. The agricultural commodity export rate rapidly increases from 37% of the agricultural GDP in 1995 to 45.7% of that in 2002. The export value of agricultural, forestry and aquaculture products has the growth rate of 13% per annum, accounting for approximately of 30% of the total export value of Vietnam.

Agricultural development and changes in agricultural structure and rural economy:

Many large-scale concentrated production zones have been developed, for example in coffee, rubber and tea production. Vietnam achieves a higher agricultural growth rate than other countries. There are rapid increases in productivity and outputs. The productivity and quality of certain crops and livestock has been assessed as good in the region and in the world.[3]

Animal husbandry sector has seen structural changes in cattle and poultry in term of increasing both in quantity and weighted ratio of animal rising for meat and milk and decreasing cattle for traction. As for pig raising, there is a trend of an increase the quantity of pigs for sales parallely with an increase in meat of pork in order to crease values and meet the market demand.

The diversification of plants and crops and the gradual removal of rice monoculture are aimed to increasing land use efficiency. In 1996, the proportion of food growing area accounted for 75.2% of total growing area and 87.2% of total sowing areas. In 2000, these proportions dropped to 72.2% and 84.7%, respectively. Areas for growing perennial crops, including industrial crops and fruit trees, increased from 11.6% to 15.3%. Regions with a tradition of rice monoculture, such as the Red River and the Mekong delta, have seen a great progress with a diversification of crops. Areas for growing industrial crops in the Red River delta increase from 60,000 hectares in 1996 to 67,000 hectares in 2000. Meanwhile, in the Mekong delta areas of industrial crops increased from 128,000 hectares to 136,000 hectares. Areas under fruit trees have been expanded even in regions which used to grow rice. In areas under fruit trees in the Red River delta increased from 38,500 hectares in 1996 to 46,100 hectares in 1999, and 48,000 hectares in 2000. Meanwhile, in the Mekong delta this increased from 177,000 hectares in 1996 to 191,000 hectares in 1999 and 200,000 hectares in 2000. Some plants with exported products, such as coffee, rubber and pepper, have seen a rapid development in growing areas, yield and output in the 1996-2000 period.

Structures of plantation and livestock have had many positive results, in the pre-renovation period the ratio of plantation against livestock was 78%/18%, in the renovation period that is 77.8/ 19.5, changing in a direction that the share of plantation is decreasing and the share of livestock is increasing, while absolute values of each sector are increasing. In order to change that structure, investment for livestock has increased gradually since 2000

[3] In 1999, the kernel coffee productivity is more than 2 tones per ha, making the coffee productivity of Vietnam the highest in the world.

onward. Since 2001 onward the Government has paid attention to invest in veterinary and botanical protection.

It has been experienced changes to meet the domestic and foreign markets of products with large quantities. Production of some export replacing products and consumption products tends to increase rapidly. Agro-forestry processing industry has experienced a new development stage; the share of industry and services against the rural economic structure is increasing gradually, reaching about 30%.

Rural industry and non-agricultural services continue to develop and expand especially in suburban, township, and industrial zones. Many traditional occupational villages have been re-established. By the end of 2000, there are 1,450 occupational villages, of which 900 traditional ones in nationwide.

The economic structural shift in the agricultural sector has contributed to improving production, living conditions, and lives in rural areas, gradually increasing farmer's incomes, poverty reduction and hunger eradication, generating more jobs in rural areas, implementing social equality in term of a new way of thinking, ensuring and stabilizing political, security and order situations in rural areas.

General evaluation: in the recent years, our agriculture and rural areas have gained important achievements, contributing positively to stabilization of economic, political, social situations, and improvements of farmers' living standards in nationwide. Entering into the renovation period, and continuing speeding up a national process of industrialization and modernization, it is essential to have strong and rigorous changes in the agricultural sector in order to create favorable conditions and facilitate actively farmers and enterprises to produce products at high productivity, quality and cheap prices; supporting enterprises to strengthen their competitiveness and effective business both in domestic and foreign markets; maintaining a high growth of agriculture; developing industry, occupation and services; meanwhile contributing positively to poverty reduction and comprehensive rural development

Difficulties and challenges: *The 2000 and 2002 reports by the Ministry of Agriculture and Rural Development (MARD) and other studies4 also highlight difficulties and problems of the sector as follows:*

Many significant potentials of agricultural and rural areas have not been efficiently exploited. At present, in Vietnam, there are still approximately 10 million ha of unused land and bare hills/mountains, out of which about 3 million ha are cultivable for agricultural and forestry production. The income brought about by agricultural production on 8.1 million ha of currently cultivated land is very low, averaged at 1,000USD per ha per annum. Considerable unused funds available have not been fully mobilized for investment in production, business and rural development. There are abundant labor sources in rural areas with up to 7-8 million people unemployed or underemployed (accounting to almost one third of the labor force in rural areas), with low labor productivity.

Agriculture in Vietnam is still outdated: many crops and livestock (tea, soybean, sugarcane, cotton, rubber, groundnut, fruits and vegetables, meat, milk, aquaculture products) of Vietnam still have productivity lower than the average one of the region and the world, low quality and efficiency, and poor competitiveness in the market.

Scientific and technological levels applied in agriculture are generally very low. Food and agricultural product processing and preservation industries are outdated and underdeveloped; the current capacity only meet approximately 60% of the needs by the tea output, 50% of that of the sugarcane output and 25% of that of the aquaculture output. The relationship among production, processing, consumption of agricultural products is still

[4] For example, studies by Dao The Anh and Hoang Vu Quang (2004), and Barker and associates (2002)

improper. Application of new technologies (e.g. biotechnology) in some sectors (especially in mountainous and remote areas) is still limited.

The cultivated area per capita of Vietnam is at the lowest rank in Asia, being scattering. In Vietnam, there are two types of land assignment: land assigned to households and to state-owned agricultural/forestry farms. On average, each agricultural/forestry farm is assigned 180 ha, which is a considerably large area. However, only about 74% of the farms are profitable. While the fund of land assigned to households is almost used up, that to state-owned farms are still being inefficiently used.

Shifts in the agricultural sector structure and from the agricultural sector to other sectors are at slow speed, particularly in terms of labor. Crop cultivation still accounts for the overwhelming percentage in agriculture. Many agricultural products have low quality (such as fruits and vegetables), high price (meat, milk, sugar, cotton, and tobacco), poor competitiveness and poor selling. Certain potential sub-sectors such as livestock and forestry have not been taken into full play.

Poor physical and technical facilities in agriculture have limited market accessibility. Electricitilization in rural areas is limited. Rural transportation and roads are very poor: up to 50% of commune roads and 30% of district roads are not accessible in rainy season. Despite significant investments in irrigation, only 50% of the agricultural land of annual crops has been irrigated. Vietnam is one of the countries which have many natural calamities, yet having limited responsiveness, and, thus, suffer from severe damages. The ongoing deteriorating environment threatens development sustainability.

Slow renovation is seen in production relationships in rural areas, resulting in poor possibilities to make full use of the capacities of various economic sectors. The process to renovate state-owned enterprises including state-owned farms is slower than requirements. The private economic sector is still small and limited, greatly in need of support by the State. The shift in economic structure of rural areas is still slow and inclined greatly in agriculture, agricultural services grow slowly, occupations and rural industry are underdeveloped. Further more backward technology has limited competitiveness of Vietnam's agriculture both in domestic and foreign markets.

Farmers' income and living standards are generally still low, and the income and living standard gap between rural and urban areas and between different regions tends to increase. The difference between the living standard in urban and rural areas in 2002 is about 2.26 times. More than 90% of the poor live in rural areas and a significant number of people from ethnic minorities are still living in hunger and poverty.

The state administration system of the sector are facing many weaknesses, especially in state administration tasks related to shifts in agricultural and rural structure, in irrigation, seeds/breeds, veterinary, plant protection chemicals, agricultural materials, forestry protection, and agricultural product quality. There are many problems in trade promotion.

The regional and international integration (accession to AFTA in 1998 and enforcement of the Vietnam-US bilateral trade agreement in 2000) has been creating many favorable opportunities for Vietnam's agricultural products to access to the world market. In addition, the integration also has imposed many big challenges for the agricultural sector to compete with other countries in the region that have higher level of development and comparative advantages of similar agricultural products. Vietnam's main comparative advantages are cheap labors and natural resource. In fact these advantages are disappearing.

In 2003, when Vietnam had to reduce its tariff in accordance with AFTA schedule, risks of failure of agricultural products without competitiveness in the world market. In addition to that, the opener it is, the more vulnerable economy is, in general, and the agricultural sector is, in particular, to external shocks such as the dramatic change in

agricultural product prices at the end of 1990s, or to measures to protect strong penetration of Vietnam's agricultural products into the markets of industrial countries.

2.3 Public expenditure for agricultural sector

Recent year's budget investment in agriculture has increased from 1,125 billion VND in 1992 and 6,836 billion VND in 1998 and 7,849 billion VND in 2003. Agriculture expenditure also accounts for 5.9% in the average budget share. However, this rate is still lower than that of some other Asian countries like China, India and Thailand which ranges from 8% to 16%.

In order to have a sustainably developed agriculture and to ensure food security, as noted in the 5-year plan 1996-2000 of MARD, the annual investment fund for agriculture required from the budget under management of MARD is 4,000 billion VND, and for the 2001-2005 plans is 6,000 VND. Actually, state budget in the last few years could only cover 50-60% of the required fund which also included the sum taken full advantage of from ODA. The situation, if had not been from the help of ODA, would have been much worse.

Despite low investment from state budget, Vietnam's agricultural sector still performs more successfully than those of other countries in the region. According to the assessment of UNDP and World Bank, Vietnam's agriculture is the strongest among many developing and developed countries excluding China. Meanwhile, its growth rate is not significant enough to confirm the stability of its agricultural sector.

3 THE GOVERNMENT'S ROLE IN PUBLIC EXPENDITURE

3.1 The Government's roles for agriculture

The Government is well aware of the importance of agriculture in the nation's sustainable development and of being an engine for poverty reduction and income generation for most of laborers. Specially, the Government considers processing of agricultural products and non-agricultural services in rural areas a means to achieve the long-term development objectives.

According to the Public Investment Program (1996-2000), to solve these weaknesses mentioned above, the Government has identified priorities for development of the agriculture and rural development as follows:

- Rural infrastructure (irrigation, rural roads, and electricity)
- Processing and post-harvesting activities
- Forest protection and afforestation
- Increase in agricultural productivity
- Increase in quality of many crops and trees, particularly for exports
- Re-distribution of incomes and poverty reduction (ethnic minority, mountainous areas)

Following the public investment program are objectives of agriculture that have been developed in the 10-year strategy and the 5-year plan, and integrated into the 2002 comprehensive poverty reduction and growth strategy (CPRGS).

Agriculture and Rural Development Plan
For the period of 2001-2005 and production objectives

Objectives: Develop a commodity production-based agriculture which is of large scale, diverse, efficient and sustainable, with high levels of productivity, quality and competitiveness based on the application of advanced scientific and technological achievements to meet domestic and export needs, and make full use of comparative advantages.

Tasks: Industrialize and modernize the agricultural production and rural economy; continue shifting the rural economy in the direction that ensure food security, export expansion, development of processing sectors, rural industries, and services in order to create sufficient jobs and increase incomes for farmers; promote strongly application of technology and science advances; Protect environment and natural resources.

Socio-economic objective: Produce 33 million tones of rice, 3 million tones of corn, 2 millions tones of pork, forest coverage of 39%, 1.1 million tones of salt, export values of agriculture of 5 millions USD, poverty ratio of less than 10% by year 2005, annually 800 thousand jobs created, 65% of the population accessible to clean water, 100% of communes accessible to electricity, health stations and schools.

Objectives for commodity production by 2005: Maintain an output of 33 million tones of rice; increase the commodity-based cultivation areas up to 1 millions ha; cashew nut growing areas up to 500,000 ha; pepper - 35,000 ha; rubber - 430,000 ha; tea - 104,000 ha; cotton - 70,000 ha. Areas for growing other trees and crops still remain stable with 4 millions ha of irrigated rice-growing areas, 250,000 ha for growing sweet potatoes, 250,000 ha for growing cassava and 300,000 ha for growing sugarcane. Tea and coffee production is to be developed only in really favorable areas. Production of vegetables, fruits, flowers and decorative plants is to be developed in different areas throughout the country. Special attention is paid to develop certain kind of fruits as specialties for domestic consumption and export. Objectives for husbandry: 24 million pigs, 10 million cattle, 300 million poultry, 2.5 million tones of meat, 120,000 tones of fresh milk. Objectives for forestry: forest zoning is speeded up for

reforestation and protection to green unused land and barren hills, to increase forest coverage, and to strictly protect nearly 11 million ha of existing land.

Investment priorities: Continuing to invest in developing and upgrading irrigation systems for multi-purpose service. Investments are made to develop other infrastructures such as transportation systems, electricity supply, post-telecommunication systems; Investing in new forest plantation and forest zoning, seeds and breeds; Development of new technologies, high technologies, clean technologies; applying information technology in the agricultural and rural sector; enhancing agricultural extension; Investing in human resource development including scientific researchers and managers at different levels, especially at grassroots levels such as communes and wards; Supporting and encouraging investments in developing post-harvest technologies; Investing in market research and development of strategic agricultural products of Vietnam; Developing market strategies.

Some of these priorities go beyond the agricultural sector and relate to rural development in general. Currently NTPs like the 5-million hectare new plantation program, the hunger eradication and poverty reduction program (Decree No. 133/198), and the program of the 1,715 poorest communes (Decree No. 135/198) are the Government's efforts to transfer these priorities into programs with massive activities, having a sudden impact to public expenditures. Later sections will focus on levels, composition and effectiveness of agricultural public expenditure.

Main orientations for the development strategy for agriculture and rural economy in the period of 2001 - 2010 approved by the National Congress of Communist Party of Vietnam as follows:

- *Promote an agricultural and rural industrialization and modernization in the direction of establishment of a big commodity-based economy, suitable with market demands and ecological conditions of each region; Quickly apply technology and science advances into production, achieve advanced level of the region in technology and income per an area unit; increase labor productivity, quality and competitiveness of products.*
- *Develop a suitable agricultural production structure. Adjust of food production projection and planning and make it suitable with demand and consumption possibility, increase productivity in line with quality of products as well. Ensure food security, increase values and effectiveness of rice production.*
- *Develop industry and services in rural areas; establish industrial zones, rural industrial zones, occupational villages serving for needs of domestic markets and exports.*

Investment priorities in the period of 2001-2010 are:

Continuing to invest in developing and upgrading irrigation systems for multi-purpose services, serving for changes in tree and animal structures, prevention of natural calamities and floods. Investments are made to develop other infrastructures such as transportation systems, electricity supply, and post-telecommunication systems.

Investing in afforestation of new forests and regeneration of forests of 5 million ha of protection and special-use forests.

Investing in development of potentials in science, and especially, in biotechnology, high technologies, clean technologies; applying information technology in the agricultural and rural sector; and enhancing agricultural extension. Support and provisions of incentives for investments in post-harvest technology. Investing in seeds and breeds, including importing, selecting, creating, disseminating and supplying seeds and breeds.

Investing in human resource development, developing synchronically staff contingent including scientific researchers and managers at different levels, especially at grassroots levels such as communes and wards.

Investing in market research and development for strategic agricultural products of Vietnam; studying to develop market strategies.

Continuing renovating the production relationship in order to make it suitable with production, re-organization of State Agricultural-Forestry Enterprises, improvement of production, better exploitation of potentials of land resources.

3.2 Expected role of public expenditure in agriculture and rural development

The role of public expenditure (which is pro-poor and aimed at providing essential commodities and public goods to create favorable environments for the poor and enhancing capacity of private and other economic sectors) compared to the real situation is reflected in the program of public expenditure and budget spending, the period of 2001- 2005.

It is imperative that public expenditure facilitate the promotion of all economic sectors' potential resources (play a catalytic role in attracting other economic sectors) in rural and agricultural development, helping ease difficulties and weakness.

It is necessary that state spending focus on public commodities like infrastructure (heading irrigation works, main road channels, roads to communes, electrical power lines to communes' low voltage stations, heading water supply programs, helping people build channels, schools and clinics), seeds assisting programs, technology transfer and scientific researches, natural disaster prevention, social sponsor, and hunger elimination and poverty reduction.

The State should minimize public expenditure on fields of which goods and services provided by private sectors, focusing on some main sectors like: (i) sectors are considered public goods; (ii) market failures due to high transaction costs and underdeveloped legal institutions; (iii) income re-distribution measures or social security system for the poor or people temporarily vulnerable to renovation, natural disasters and risks; and (iv) creating a legal framework and regulation that makes it easier for private investments.

3.3 Non-State sector's role

Identifying roles of the State' sector and private sector to allocate agricultural expenditures is a difficult task, especially when the Vietnam's economy is undergoing a rapid structural transition period. Agricultural public expenditures, if well-managed, will have positive impacts to agricultural productivity and attraction of more private investments in agriculture.

i. *E.g. long-term investment for research, agricultural extension, irrigation and rural infrastructure has made an important contribution to increasing productivity of some Asian countries (Fan and Pardey, 1998).*

ii. *Particularly in India, public expenditures for rural roads, and research for agriculture and agricultural extension are the most influential elements to the productivity increase and poverty reduction compared with other investments (Fan, et al. 1999).*

iii. *In other hand, improper public expenditures will occupy places, where private investments prove more effective, lead to a wrong allocation of natural*

resources and prevent the sector from development. E.g. ineffective subsidiaries for plantation or using the State Budget's investments for processing and marketing activities which may be well-done and managed by the private sector.

State investment plays a role in attracting joining investment from other economic sectors. Thanks to the openness of state investment and agricultural policies in recent time, farms have been ever increasing. 2001 statistics show that there are currently over 60,700 farms nationwide, among which 35.9% planting annual plants, 27.3% perennial plants, 27.9% aquaculture; livestock, forestry and combined business farms are underdeveloped. Farms often are located in areas with great soil potential like Mekong Delta (31,140 farms), Eastern Cochin (12,703 farms), Central Highland (6,028 farms). Total invested capital of the above farms is up to VND8000b, mainly of which is from farm owners, generating more than 300,000 employments. Farm owners know how to make use of advantages, soil potentials, labors, have been contributing to establishment and development of a concentrated commodity production zones.

Foreign direct investment in the period of 1999-2002 is remarkably huge: about USD 400m, (VND6, 000). This is one of important resources contributing to enhance production ability. Alongside with advanced facilities and technologies, FDI projects have transferred to our agriculture various international standard plant seeds and livestock, meeting the increasingly high demand of domestic and foreign market.

Recently, in areas with huge state investment in big irrigation works in 1980s-1990s, private investment in irrigation (mainly pumping water out of class 2 and class 3 channels or of sources) has been significantly increased. Associations of water users jointly paying for being served irrigation water among wards, communes, and inter-communes are on the rise in number. The association model has, in fact, quite effective realized the motto" State and common people work together". Another example of State investment's catalytic role is that drilled wells have made use of water which is gradually passed from conservatoires and class 1 channels in the neighboring areas of the irrigation work Dau Tieng.

3.4 Beneficiaries contribution in promoting investment

In recent years, beneficiaries voluntarily contribute under various guises (money, property, or labor), depending on each person's financial situation, reducing sharply an idea of relying completely on the Government. Here are some achievements:

- *Under the principle of concretization of the channel system in irrigation investment, in the year of 2001, 13,400 km channels of all levels were made firm, among which 1,400km of class 1 channels were constructed firmly by the Ministry of Agriculture and Rural Development with the total invested capital of VND 1,000 billions VND (31,4%), 3,500km of class 2 channels by local provinces, accounting for over 31% of total investments, 8,500 km of the class 2 channels were built with the cooperation of common people contribution and State budget, relevant to 37.6% stated investment. Tuyen Quang, Thanh Hoa and Nghe An offer typical examples of success in this field. Such achievements in mobilization of people's internal resources for concretization of the channel system have actually improved effectiveness of the Government's investments of headwork and class I and class II channels.*
- *Under the programme of clean water and rural hygiene in the period of 1999-2002, people's contribution was up to VND 460, accounting for 46% of the state's capitals for this period. Such contributions have partially contributed to*

increasing proportion of rural people accessible to clean water from 32% (in 1998) to 50% (in 2002).

- *Under the agricultural extension program, from 1999 to 2003 households have contributed 63,086 billions VND, equivalent to 20% - 24% of the programs in which the State and people contribute together.*

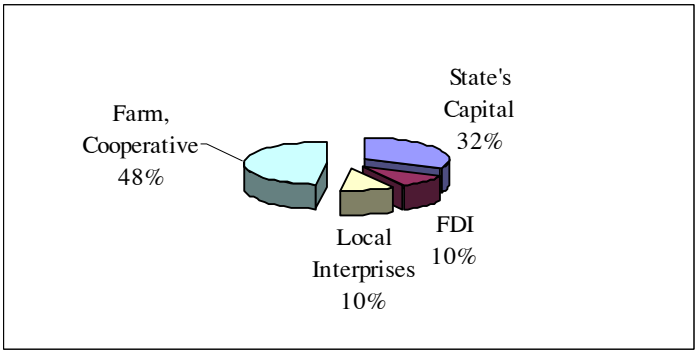
3.5 Share of investment capitals for agricultural development

According to statistics of the General Statistical Office (Statistical yearbook 1999-2002), total invested capital of agriculture and rural area within four years 1999-2002 VND is VND 61,017billions, table 1.

Table 1: Investment capitals for agricultural development (1999 - 2002)

	1999	2000	2001	2002	1999-2002
1- Total	**15,642**	**17,218**	**13,628**	**14,529**	**61,017**
2- State budgets	***4,070***	***4,435***	***5,653***	***5,352***	***19,510***
3- FDI	***1,501***	***1,176***	***739***	***2,634***	***6,050***
4- Local Interprises	***770***	***1,277***	***2,144***	***2,104***	***6,295***
(1) Agro-Forestry Enterprises	*770*	*986*	*1,481*	*1,194*	*4,431*
Of Which: - Commercial Loans		698	805	671	2,174
- Own's		189	626	416	1,231
- Others		99	50	107	256
(2) Forestry processing Enterp.		*291*	*663*	*910*	*1,864*
Of Which: - Commercial Loans		60	217	355	632
- Own's		121	384	423	928
- Others		110	62	132	304
5- Capital of Farm Ownes/SAFEs/Cooperatives	***9,301***	***10,330***	***5,092***	***4,439***	***29,162***

Figure 1: Share of investment capitals for agricultural development (1999 - 2002)



State budget capital of VND 19.510 billions 32% (Statistics supplied by Ministry of Finance) focuses on such issues as irrigation infrastructure, rural roads, markets and school in rural areas, seeds assisting programme, 5m ha forest programme, clean water and rural hygiene programme, scientific researches. Infrastructure improvement in really poor communes, helping ethnic minorities with permanent agriculture and permanent settlement.

FDI of VND 6,050 billions (10%) is invested into plantation and husbandry organizations.

Local enterprises' capital of VND 6.295 billions (10%) (Loans and mobilized capital) is mostly spent on concentrated goods producing and agro-forestry products processing areas.

Capital of owners of farms, agro-forestry collective farms, and cooperatives is VND 229.162 billions (48%). This is the biggest investment, in which most capital is from farm owners who invest into annual and perennial plants, and aquaculture and is concentrated in Mekong Delta, East of Cochin and Central Highlands.

Over the past few years, it is Vietnam's open mechanisms and stable politics that help attract capital flow of various local and foreign economic sectors to invest in agriculture development. What has been gained shows that socializing policy on agricultural developing investment has been obtaining noteworthy success. However, investments from non-State Budget have just contributed to establishment of concentrated commodity production zones only, investments for rural infrastructure are very limited.

4 ANALYSIS OF AGRICULTURAL PUBLIC EXPENDITURES

4.1 Agricultural public expenditure

Results of agricultural public expenditures for a period of 1996 - 2003 have been statistic and analyzed accordingly to expenditures (capital expenditure, recurrent expenditure) and to main sectors (irrigation, agriculture, forestry, science and technology research, agro-forestry extension), in each sector, analysis focus on weighted ratios of expenditures, results yielded by investments, shortcomings and constraints, causes and recommendations.

Data for analysis and evaluation are based on statistic data and references provided by Ministry of Finance (public expenditure for the entire agricultural sector and localities) and planned and liquidated data of MARD.

4.1.1 General evaluation

Total State Budget for agriculture for a period of 1996-2003 as follows:

Table 2: the State Budget for agriculture

Item	1996	1997	1998	1999	2000	2001	2002	2003	96-03
Public expenditure for agriculture (billions VND, at the current price)	**2,455**	**3,712**	**4,591**	**7,276**	**7,308**	**8,257**	**8,477**	**7,849**	**49,925**
Recurrent expenditure		*1,003*	*1,098*	*981*	*1,211*	*1,390*	*1,641*	*1,650*	***8,974***
Capital expenditure	*2,455*	*2,709*	*3,493*	*6,295*	*6,097*	*6,867*	*6,836*	*6,199*	***40,951***
Public expenditure for agriculture (million VND, at the 1994 fixed price)		**2,567**	**2,855**	**5,773**	**5,856**	**6,647**	**6,810**	**5,866**	**36,374**
Recurrent expenditure (source: Ministry of Finance)		694	683	981	1,211	1,390	1,641	1,650	***8,250***
Capital expenditure	1,742	1,873	2,172	4,792	4,645	5,257	5,169	4,216	***29,866***
Proportion of public expenditure for agriculture in total budget expenditure (%)		5.20	6,30	8.58	7.08	6.92	6.26	5.41	6.64
Proportion of public expenditure for agriculture		1.20	1.30	1.82	1.65	1.72	1.58	1.44	1.57

against GDP (%)									
Proportion of public expenditure for agriculture against GDP of agriculture (%)		4.60	4.90	8.17	7.82	8.79	8.24	7.58	7.54

(*Source: Planned settled figures and statistics of the Ministry of Agriculture and Rural Development, Report on evaluation of public expenditure in 2000 of the Ministry of Finance, the World Bank)*

The above table shows that budget expenditure for agriculture from 1996 and 2003 was put at VND 49,925 billion (or VND 36,374 billion according to the fixed price in 1994), accounting for *6.64% of total budget expenditure, 1.57% of GDP and 7.54% of GDP of the agriculture sector*. In the 2000-2003, total expenditure was put at VND 25,179 billion (according to fixed price), or 2.25 fold higher than 1996-1999 period but the proportion in total budget expenditure dropped from 7.1% to 6.41%. This proves that the policy on public expenditure for agriculture has met only between *60 and 70% of the demand* for the development of agriculture and rural development in the Government strategy.

Current expenditure stood at VND 8,974 billion, accounting for 18% of total budget expenditure for agriculture. Of this figure, VND 3,541 billion was allocated via the Ministry of Agriculture and Rural Development. Investment expenditure was totaled at VND 40,951 billion, equal to 82 per cent of total expenditure for agriculture. The ratio between current expenditure and investment expenditure was 1:4.5. As for the capital expenditure, expenditure for infrastructure and basic construction accounts to 7/10 of the total expenditure. As for recurrent expenditure, expenditure for goods and services takes a highest proportion (approximately 9.9%-12.8% of the total expenditure); wages and salaries 3.4%-4.4%; additional support 2.4%-3.2% of the total expenditure, mainly for plantation (0.6%-1.1%).

Table 3: State budget expenditure structure for sectors for a period of 1999-2002

(% of total State Budget expenditure for sectors)

	1999			*2000*			*2001*			*2002*		
	Total	*Capital expenditure*	*Recurrent expenditure*	*Total*	*Capital expenditure*	*Recurrent expenditure*	*Total*	*Capital expenditure*	*Recurrent expenditure*	*Total*	*Capital expenditure*	*Recurrent expenditure*
Plantation	14.40	29.58	1.47	23.39	37.47	12.69	37.16	51.60	21.86	18.94	41.12	3.44
Husbandry	61.95	68.36	53.12	57.77	66.82	33.34	55.00	63.82	26.43	20.57	15.65	27.86
Veterinary	7.90	21.83	3.00	8.63	15.59	7.44	16.16	48.87	2.87	17.23	46.38	9.50
Forestry and other related services	18.95	32.07	11.41	14.97	17.84	12.55	21.26	28.39	16.03	22.60	29.41	16.29
Afforestation	43.42	14.80	77.90	37.39	1.33	77.97	2.23	2.66	0.00	18.62	22.89	2.34
Resettlement and fixed cultivation	3.84	5.84	0.00	7.43	11.77	1.71	13.77	23.81	2.00	36.89	51.48	1.10
Irrigation and other related services	49.75	52.23	7.15	37.70	38.88	20.43	27.23	27.81	17.48	21.84	22.02	19.09
Total	**46.27**	**53.87**	**14.77**	**31.14**	**34.93**	**17.28**	**25.67**	**27.85**	**16.78**	**20.79**	**21.73**	**17.72**

Table 4: Agricultural public expenditure by sub-sectors, for a period of 1999-2002

(% of total expenditures)

	1999						2000						2001						2002					
	Total budget expenditure	*Total capital expenditure*	*Total capital expenditure for basic construction*	*Total recurrent expenditure*	*Total expenditure for wages and salaries*	*Total expenditure for extra subsidy and support*	*Total budget expenditure*	*Total capital expenditure*	*Total capital expenditure for basic construction*	*Total recurrent expenditure*	*Total expenditure for wages and salaries*	*Total expenditure for extra subsidy and support*	*Total budget expenditure*	*Total capital expenditure*	*Total capital expenditure for basic construction*	*Total recurrent expenditure*	*Total expenditure for wages and salaries*	*Total expenditure for extra subsidy and support*	*Total budget expenditure*	*Total capital expenditure*	*Total capital expenditure for basic construction*	*Total recurrent expenditure*	*Total expenditure for wages and salaries*	*Total expenditure for extra subsidy and support*
Plantation	4.2	1.9	1.4	2.2	0.2	0.9	4.2	1.8	1.5	2.4	0.2	0.7	5.0	2.6	2.2	2.4	0.1	0.6	5.0	2.0	1.7	2.9	0.1	1.1
•Husbandry	2.0	1.2	1.1	0.9	0.0	0.4	2.1	1.5	1.3	0.6	0.0	0.4	2.3	1.8	1.6	0.6	0.0	0.4	2.9	1.7	1.1	1.2	0.0	0.5
Veterinary	2.0	0.5	0.3	1.5	0.4	0.0	2.4	0.3	0.2	2.0	0.7	0.0	2.1	0.6	0.4	1.5	0.7	0.0	2.5	0.5	0.3	1.9	0.8	0.0
Forestry and other related services	7.5	2.7	1.2	4.7	1.5	0.1	8.3	3.8	2.5	4,5	1.7	0.1	7.5	3.2	1.8	4.3	1.6	0.1	8.7	4.2	2.9	4.5	1.6	0.1
Afforestation	1.4	0.7	0.7	0.6	0.0	0.0	1.4	0.7	0.7	0.6	0.1	0.0	0.7	0.6	0.6	0.1	0.0	0.0	1.0	0.8	0,5	0.2	0.0	0.0
Resettlement and fixed cultivation	1.6	1.1	1.0	0.6	0.0	0.3	2.2	1.2	1.2	0.9	0.2	0.3	1.9	1.0	0.9	0.9	0.2	0.2	2.2	1.5	1.5	0.6	0.2	0.2
Irrigation and other related services	64.2	60.7	55.3	3.5	0.4	0.2	64.1	60.0	53.9	4.1	0.4	0.3	66.4	62.6	55.0	3.8	0.4	0.3	60.,2	56.6	51.3	3.6	0.3	0.1
Total	**100.0**	**80.6**	**71.9**	**19.4**	**3.4**	**2.4**	**100**	**78.5**	**69.2**	**21.5**	**4.4**	**2.9**	**100.0**	**80.3**	**69.4**	**19.7**	**4.1**	**2.7**	**100.0**	**76.5**	**66.9**	**23.5**	**4.2**	**3.2**

(Source: Ministry of Finance)

4.1.1.1 Sectorial level and trends for public expenditures

Table 4 shosws that agricultural public expenditures[5] for the period of 1999-2002 has increased 1.28 fold higher from 3,412 billions VND in 1999 to 4,364 billions VND in 2003 (at the 1994 fixed price). Average annual expenditure growth is 8.6%, of which these of recurrent expenditure and capital expenditure are of 15.5% and 6.8% respectively. The year of 2001 has experienced the highest agricultural public expenditure growth, up to more than 7 thousand billions VND. Meanwhile recurrent expenditure tends to have a stable growth, capital expenditure is fluctuating. In 2001, capital expenditure increased sharply from 2,814 billions VND to 3,619 billions VND.

Table 5: Agricultural public expenditure for a period of 1999-2002

	1999	*2000*	*2001*	*2002*
Public expenditures for agro-forestry and fishery (billions VND, at the current price)	5,326	5,804	7,420	7,471
Recurrent expenditure	1,027	1,263	1,466	1,735
Capital expenditure	4,300	4,542	5,953	5,736
Public expenditures for agro-forestry and fishery (billions VND, at the 1994 fixed price)	3,412	3,596	4,510	4,364
Recurrent expenditure	658	782	891	1,013
Capital expenditure	2,755	2,814	3,619	3,351
Structure of Public expenditures for agro-forestry and fishery (%)	100.00	100.00	100.00	100.00
Recurrent expenditure	19.27	21.76	19.76	23.22
Capital expenditure	80.73	78.24	80.24	76.78
Growth of Public expenditures for agro-forestry and fishery (%)		5.40	25.42	-3.25
Recurrent expenditure		18.98	13.92	13.70
Capital expenditure		2.16	28.61	-7.42
Proportion of public expenditure for agro-forestry and fishery in total budget expenditure (%)	6.28	5.63	6.21	5.51
Proportion of public expenditure for agro-forestry and fishery against GDP (%)	1.33	1.31	1.54	1.39
Proportion of public expenditure for agriculture against GDP of agro-forestry and fishery (%)	5.24	5.36	6.63	6.06
Bias indicator (%)	24.70	22.98	26.77	23.96
Proportion of public expenditure for agro-forestry and fishery per person living in rural area, at the fixed price (thousand VND)	58.31	61,13	76.18	73.07
Proportion of public expenditure for agro-forestry and fishery per an agricultural worker, at the fixed price (thousand VND)	138	144	178	

Proportion of public expenditure for agriculture is relatively stable. Like the previous years, in the period of 1999-2002 agricultural public expenditure takes a proportion of 5.6%-6.3% of the total budget expenditure. This proportion is lower than these of other countries in the region like Thailand, China, and India. Agricultural public expenditure is only 1.3%-1.5% against GDP, an insignificant increase compared with that of the period of 1997-1998.

[5] Agriculture in this report includes three (3) sub-sectors, namely agriculture and forestry.

Compared with GDP of agriculture, agricultural public expenditure has tended to increase insignificantly since 1992, from 5.2% of GDP of agriculture in 1999 to 6.1% in 2002. Agricultural public expenditure per an agricultural worker has increased 1.5 fold higher than that of the last period, from 112 thousand VND in 1998 to 178 thousand VND in 2001. Given a trend of a decreasing proportion of agriculture against to GDP, these figures reveal that agricultural public expenditure has been improved to a certain extent. However bias indicators are more or less 25%, showing that agriculture has not been supported properly from the State Budget compared with its contribution to GDP.

However, if agricultural public expenditure is considered only in supporting to implementation of objectives and targeted priorities of agriculture, it will not be a comprehensive view. Agriculture and rural areas have received support from the State Budget indirectly through public expenditure for other fields related to provisions of essential services and rural infrastructure such as education, health, roads, electricity, communication, and culture. Besides, NTPs for poor areas and the extremely difficult communes are also expenditures for rural areas. But these issues go beyond the scope of this report, then shall not be discussed here.

4.1.1.2 Public expenditures according to management levels (central and local levels)

Generally, public expenditure has been more and more decentralized with more authority devolution to provincial levels, obviously since 1999. In 1998, budget expenditure at central level accounted to 60.0% of total State Budget, but in 1999 this proportion decreased to 46.3%; and in 2002 fallen to 20.8%. However, budget decentralization occurs strongly and mainly in capital expenditure, while recurrent expenditure remains a fairly stable proportion of approximately 17% of the total budget expenditure spent at central level and the rest spent at local levels. Because recurrent expenditure is regular expenditures at a fairly stable ratio from year on year.

Together with a strong budget decentralization on capital expenditure, additional budgets are allocated to expenditures of wages and salaries for implementation of this task at local levels. More detailed figures of a proportion on recurrent expenditures between two central and local levels show that expenditures of wages and salaries spent at local level increased gradually compared with that at central level (from 90.1% of total budget expenditure in 1999 to 93.3% in 2001 and 92.1% in 2002). However, central level seems to have more authority to increase support and additional expenditures than local level seems to have, from 7.9% of the total additional expenditure in 1999 to nearly 19% in the three following years.

Proportions of budget expenditures between central and local levels for sub-sectors of agriculture in this period have changed quickly. In 1999, three sub-sectors like husbandry, irrigation and afforestation have relatively high proportions of budget expenditures spent at central level (62.0%, 49.8% and 43.4% respectively). In the following years, these proportions have fallen quickly to more or less 20% in 2002. Meanwhile, budget expenditures for forestry, veterinary and resettlement and fixed cultivation have experienced an opposite direction of development, resulting in fairly equal proportions of budget expenditures for each sectors at central level in 2002, accounting to 20% of the total budget expenditure (except from afforestation).

4.1.1.3 Budget expenditure structure according to sub-sectors

Budget expenditure structure according to sub-sectors is quite stable. The sub-sector takes most of agricultural budget expenditures are irrigation, including expenditure for flood

and storm prevention (accounting to 60%-66% of total agricultural public expenditure). Following are forestry (7-8%) and plantation (4-5%). Other activities like afforestation, husbandry, and veterinary have modest proportions. The table of items of current budget expenditure does not allow to separate accounts for agricultural extension, research and implementation for agriculture. However, estimated figures show that expenditures for research in agriculture are still too small (approximately 0.1% of GDP agriculture).

As for expenditures for irrigation services for agriculture are reserved mainly for plantation, apparently this budget expenditure structure still inclines in plantation (accounting to two third (2/3) of total agricultural public expenditure), but does not tend to promote development of other higher-value added sectors (like husbandry, aqua cultural production) in order to satisfy an increasing consumption demand for meat, milk and fish.

4.1.1.4 Budget expenditure structure according to region

In the period of 1999-2002, with a focus on development of agriculture and rural areas, agricultural budget expenditure per capita per region tends to target more on the poor than the previous periods it means budget expenditure per capita of poor areas is higher than that of richer ones. In the period of 1997-98, the South Eastern region (which has a highest average ratio of income per capita in Vietnam) has annual public expenditures for agriculture of almost 26 thousand VND while poor regions like North Central region and Coastal Central region have annual public expenditures for agriculture of more or less 21 thousand VND. In the period of 1999-2002, the situation has changed. The poorest region is the North Western region that has received the highest annual agricultural public expenditure per capita (77 thousand VND), approximately 1.5 fold higher than that of South Eastern region.

Table 6: average annual public expenditure for agriculture per capita

For a period of 1997-2002 (thousand VND)

Region	*Expenditures 97-98*	*Expenditures 1999-2002*	*Ranking of expenditures 98-99**	*Ranking of expenditures 99-02**	*Average annual growth, period 99-02*	*Poverty ranking 2002***
Red River delta	17,638	49,017	8	7	17.6	7
North Eastern region	28,380	73,593	3	2	73.6	4
North Western region	35,250	77,079	2	1	77.1	1
Northern Central region	21,084	60,721	7	4	60.7	3
Coastal Central region	21,531	57,232	6	5	57.2	5
Central Highland	52,117	71,336	1	3	71.3	2
South Eastern region	25,912	45,262	4	8	45.3	8
Mekong River delta	23,285	49,311	5	6	49.3	6
Vietnam	**24,405**	**55,584**	**-**	**-**	**55.6**	**-**

***Note**: * the province has the highest expenditures is ranked as the first and vice verse.*
*** The poorest province is ranked as the first and vice verse.*

***Source**: Calculation and ranking are based on data provided by Ministry of Finance and Report on "Poverty" of donors (2003).*

At the current price, in the period of 1999-2002 agricultural budget expenditure per year in all regions (except from the Mekong River delta) had higher growth rates than those in 1998. However, agricultural public expenditure for all regions has positive growth rates for two years for 1999 and 2000 only. In 2001, growth rates of four poor regions like North Eastern, North Western, North Central and Coastal Central regions experienced a slowdown, and in 2002 growth rates of agricultural public expenditure in all regions were lower than those of 2001.

Public expenditures for irrigation in all regions take more than a half of agricultural public expenditures. However, in midland and mountainous areas (like Central Highland and North Western regions) the shares of public expenditures for forestry-related activities are higher than those of other regions, while in the deltas expenditures for irrigation occupy a bigger share. Expenditures for construction of irrigation works in mountainous areas are significantly higher than in the lowland, while people living in these regions are poorer than those are in the lowland. This explains why the number of irrigation works built in mountainous areas is still small, and irrigation in these areas has not supported to agriculture to produce added values as high as in the deltas.

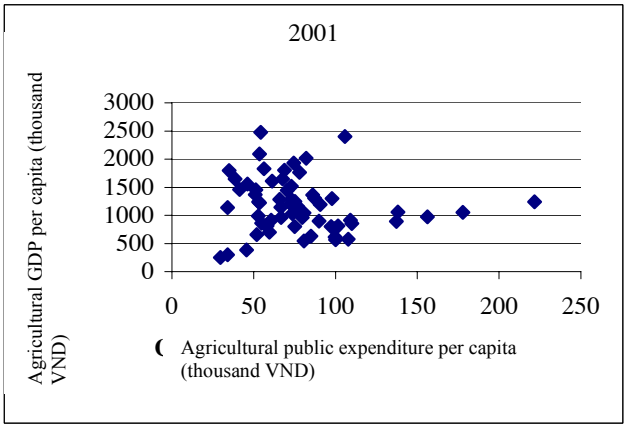
Except from South Eastern region, other region reserves a too small amount of expenditure for husbandry and veterinary. This may be an orientation that has not fully supported for farmers to meet the market demand. When people's incomes increase, they tend to consume more high nutrition agricultural products of husbandry like meat, egg, milk.

4.1.1.5 Budget expenditure structure according to provinces

The below figure shows that agricultural budget expenditures by provinces tend to have a same direction of growth with GDP of agriculture by provinces. This means that public expenditures have impacts to promotion of agricultural development, but distribution of agricultural public expenditure by provinces has not benefited for poor provinces.

Figure 2: Agricultural public expenditure and agricultural GDP per capita

By provinces 2001 (thousand VND/person)



4.1.1.6 Cross-cutting issues

Subsidy and support for regions/groups/activities that are used mostly by the poor (benefit to the poor, equality and gender-sensitiveness)

At present, the Government is subsiding for some activities of agricultural sectors such as: about a half of expenditure for operation and maintenance of irrigation works; some seed, seedling and animal breeding programs in the form of a partial price subsidy for new seeds; all expenditures for agricultural extension including capital expenditure, recurrent expenditure and other agricultural extension programs. Expenditures for agricultural extension are considered as the State's funds for dissemination and propagandizing the most necessary agricultural extension activities for farmers; consulting services and training on veterinary; support expenses for depletion of diseases of animals and trees.

4.1.2 Capital expenditure for basic construction

Capital expenditure directly managed by MARD accounts to 40.92% of total capital expenditure for agriculture. Proportion of capital expenditure managed by the central level tends to decrease gradually from 48% in 1996 to 41% in 2003. This means that investment policy for agriculture has changed its direction accordingly to the public expenditure reform strategy: Central level manages the strategic projects /programs that are decisively important to structural changes of entire sectors or regions; local level bring their own resources into a full play to implement the investment and development plan within their territories, avoiding an overlap in investment.

Table 6: ***Structure of investment for basic construction according to management levels***

Unit: billions VND

No.	Investment	Year								
		1996	1997	1998	1999	2000	2001	2002	2003	96-03
1	Managed by MARD	1,167	1,510	1,677	2,942	2,633	2,869	2,301	1,681	16,780
	%	*48*	*56*	*48*	*47*	*43*	*42*	*34*	*27*	*41*
2	Managed by localities	1,288	1,199	1,816	3,353	3,464	3,998	4,535	4,518	24,171
	%	*52*	*44*	*52*	*53*	*57*	*58*	*66*	*73*	*59*
3	Managed by the entire sector	2,455	2,709	3,493	6,295	6,097	6,867	6,836	6,199	40,951
	%	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*

(Source: Figures of localities in documents of the Ministry of Finance and documents on public expenditure in the 1993-1999 period; figures managed by the Ministry according to planed and settled figures)

From 1996 to 2003, total investment managed by MARD stood at 16,780 billions VND of which: Irrigation accounting to 68%, Agriculture 9%, Forestry 10%, rural infrastructure 9% and other investments 4%. These proportions have varied from period to period: in the period of 96-99 (Figure 1) the proportion of irrigation accounted to 78% but in the period of 2000-2003 (Figure 2) it fallen to 60%. Similarly, proportions of agriculture, forestry and infrastructure have increased, from 8% (as for agriculture, forestry), 4% (as for rural infrastructure) to 11% (as for agriculture, forestry), and 13% (as for rural infrastructure). Given with the above-mentioned structure of capital expenditures, it is observed that the investment structure has changed, tasks of irrigation have changed that investments are not only set aside for irrigation works for rice production but also for other purposes such as irrigation for industrial trees, clean water for rural areas and infrastructure.

Table 7: Investment structure for agriculture

Unit: Billions VND (at the current price)

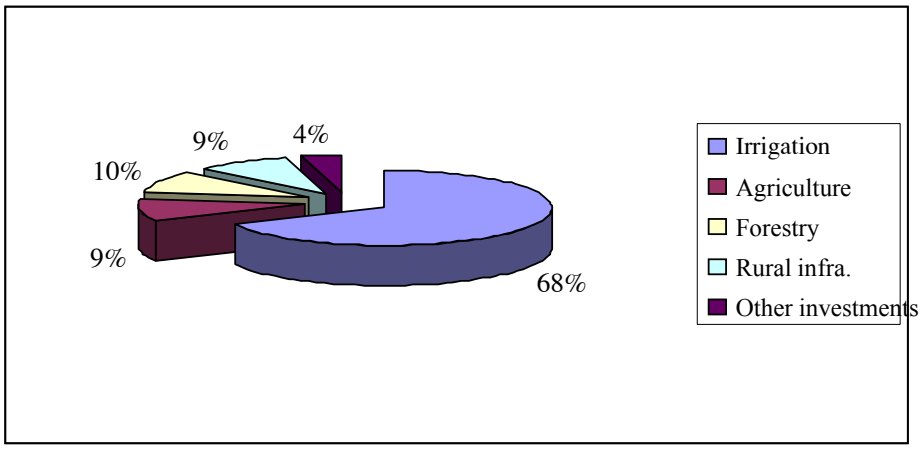
	Investment	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**96-03**
A	**Managed by MARD**	1,167	1.,10	1,677	2,942	2,633	2,869	2,301	1,681	16,780
	Domestic investment	738	1,129	1,078	1,935	1,300	1,699	1,067	751	9,696
	ODA[6]	429	381	599	1,007	1,333	1,170	1,234	931	7,084
1	Irrigation	876	1.237	1,407	2,316	1,871	1,826	1,123	803	11.459

[6] It is mainly a plan of ODA loans.

	Domestic investment	*546*	*927*	*924*	*1,580*	*1.268*	*1,231*	*610*	*415*	*7.501*
	ODA	*330*	*310*	*484*	*736*	*603*	*595*	*513*	*388*	*3.958*
2	Agriculture	117	137	100	195	307	264	261	156	1.536
	Domestic investment	106	133	89	187	-80	241	217	74	966
	ODA	11	4	11	7	387	23	44	82	570
3	Forestry[7]	135	100	121	258	193	201	362	257	1,627
	Domestic investment	*47*	*33*	*29*	*88*	*66*	*53*	*199*	*40*	*556*
	ODA	*88*	*67*	*92*	*170*	*127*	*148*	*162*	*217*	*1,071*
4	Rural infrastructure			12	99	220	345	350	245	1,270
	Domestic investment			*0*	*5*	*5*	*-59*	*-165*	*0*	*-214*
	ODA			*12*	*95*	*215*	*404*	*515*	*244*	*1,484*
5	Other investments						180	155	160	495
6	Preparation for Investment	21	20	25	35	28	28	25	35	216
7	Design-Projection	18	16	11	39	14	26	25	27	177
B	**Localities**	1,288	1,199	1,816	3,353	3,464	3,998	4,535	4,518	24,171
	Total investment of the entire sector	2,455	2,709	3,493	6,295	6,097	6,867	6,836	6,199	40,951

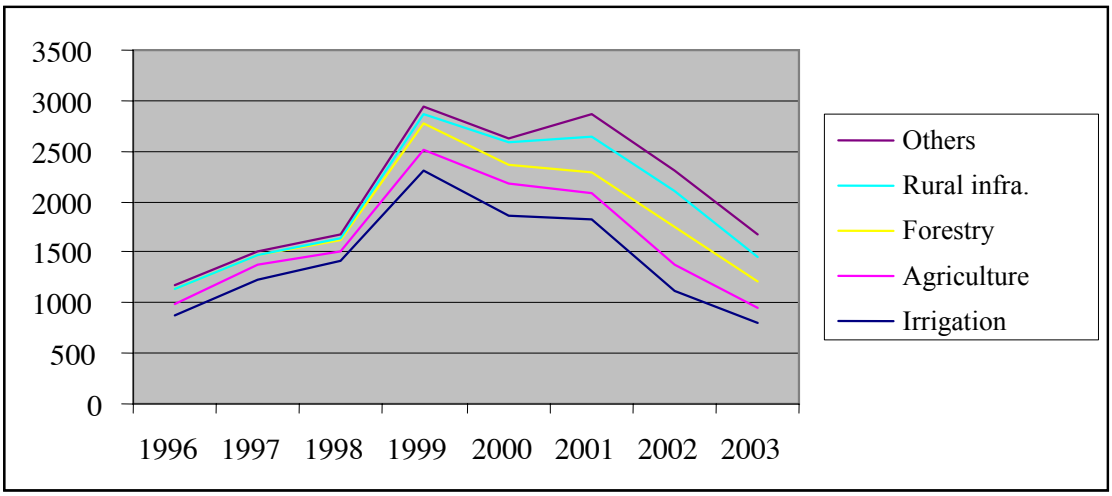
(Source: Figures of localities in documents of the Ministry of Finance and documents on public expenditure in the 1993-1999 period; figures managed by the Ministry according to planed and settled figures)

Figure 3: Public expenditure structure by sectors managed by MARD for the period of 1996-2003



[7] The program 661 is not included

Figure 4: Investment capitals by periods



4.1.2.1 Capital expenditure irrigation:

Investment capital from the State budget expenditure for irrigation work from 1996 to 2003 was put at VND 11,459 billions, equal to 60 % of total investment from State budget expenditure for agriculture and rural areas, which was managed by the Ministry of Agriculture and Rural Development. Of which domestic investment is of 7,501 billions VND, equal to 65% of total investment from State budget expenditure for irrigation, ODA is of **3,958** billions VND, equal to 35%.

Investment for agricultural irrigation work for the whole period was put at VND 10,120 billion, accounting for 85%; investment for dykes, dams and channels, VND 1,339 billion, accounting for 11%. Investment in irrigation work in the period was concentrated on upgrading major irrigation works, maintaining capacity of the existing works to water 240,000 hectares and supply water for 210,000 other hectares, as well as to prevent salt water for 150,000 hectares, bringing total area accessing water from 6.6 million hectares in 1996 to 7.5 million hectares in 2000. This result has produced positive impacts on production areas, helping increase productivity and quality of rice, as well as boosting the restructure in agriculture. Effective projects in the period include the project on restoring the irrigation system in Do Luong, Nghe An province, with loans from the Asian Development Bank (ADB), strengthening Bai Thuong dam in Thanh Hoa province, upgrading the Hanoi dyke, and a project on irrigation system of the Red river, which has upgraded 28 irrigation works and pumping stations of Red River delta provinces; irrigation system development in Central Vietnam and Ho Chi Minh City, completion of major projects (projects of Group A), including the works in Thach Nham, Quao river and Azunha.

Table 8: Investment expenditure structure for irrigation by region

Unit: Billions VND

		1996	1997	1998	1999	2000	2001	2002	2003	Cộng	%
I	Irrigation	**876**	**1,237**	**1,407**	**2,316**	**1,871**	**112,111**	**1,123**	**803**	**121,744**	**97**
A	*Irrigation*	**765**	**1,071**	**1,298**	**2,166**	**1,608**	**111,891**	**963**	**643**	**120,405**	***85***
1	Red River delta	125	295	315	645	482	400	124	130	2,516	21
2	Northern mountainous region	54	70	78	217	155	110,395	75	76	111,120	7
3	North of Central Vietnam	233	159	357	507	301	341	103	37	2,037	17
4	Central Highlands	25	23	26	86	71	65	50	47	392	3
5	Central coastal region	34	159	92	103	171	279	161	21	1,019	9
6	South-eastern region	19	33	36	228	102	104	48	14	584	5
7	Mekong delta	254	307	315	337	286	256	353	318	2,426	20
8	Others	21	26	80	42	40	52	50	0	310	3
B	*Dykes and dams*	**112**	**166**	**109**	**150**	**263**	**220**	**160**	**160**	**1,339**	***11***
II	Preparation for Inverstment	**21**	**20**	**25**	**35**	**28**	**28**	**25**	**35**	**216**	2
III	Design-Projection	**18**	**16**	**11**	**39**	**14**	**26**	**25**	**27**	**177**	1
	Total	**915**	**1,273**	**1,443**	**2,390**	**1,913**	**112,164**	**1,173**	**865**	**122,136**	**100**

Investment in irrigation has changed with a gradual increase in upgrading the existing works, from 28% in 1996 to 48% in 2000 and 64% in 2003 and with a reduction in building new works. A concentration has been given to major mountainous and the Central Highlands regions. Expenditure for investment in irrigation was shown in two above-mentioned figures. The figure show that the Mekong delta has received a great attention during the period with an increase in investment from 24% in the 1996-1999 period to 26% in the 2000-2003 period. The northern mountainous, the Central Highlands, the central coastal and south-western regions were granted with a great attention in investment, mainly to upgrade the existing works and systems. Accordingly, investment for irrigation in the Central Highlands increased from 3% in the 1996-1999 period to 5% in the 2000-2003 period; the central coastal region, from 8% to 13%. At the same time, in those regions which saw a stable development in irrigation and could develop effectively revenue-expenditure mechanism, investment from budget was turned down. For example, investment for the Red River delta was reduced from 22.4% in the 1996-1999 period to 18.75% in the 2000-2003 period, while the figure for northern-central region, from 24% to 15.5%.

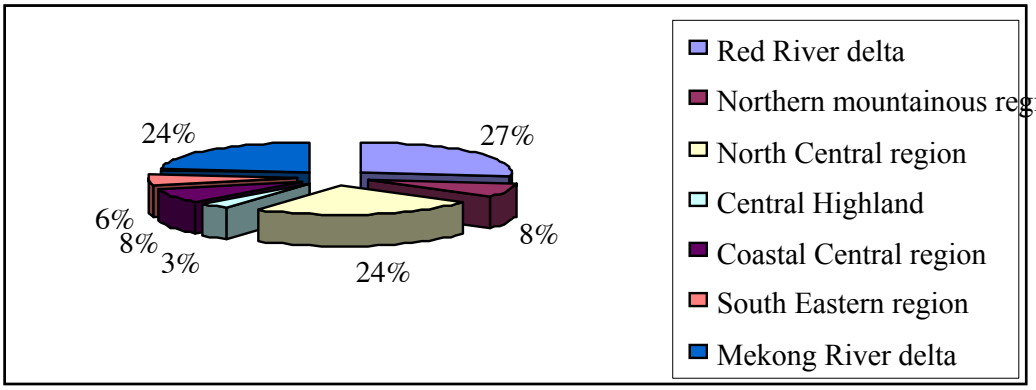
In the period, although the State budget faced pressure due to the fact that its revenues could cover expenditures, in some years, the State gave a priority for provision of capitals as planned (despite inadequate investment capital for implementation). This helped increase the capacity of watering and regulating water for agricultural production and rural areas.

So far, 180 works have completed their settlement and become operational with a total investment of VND 2,994 billion forming social assets.

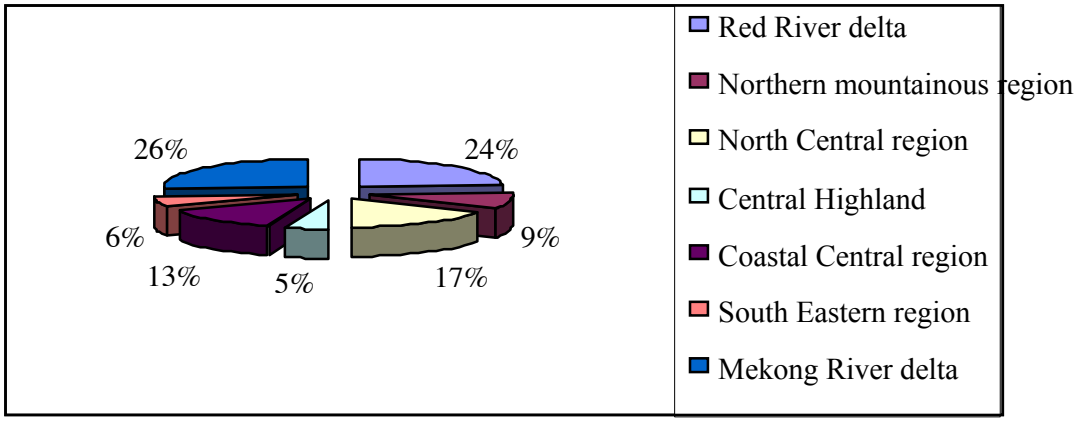
Alongside capital priorities, the financial mechanism has seen a great progress in management and allocation of money for capital construction for agriculture in general and irrigation in particular from a passive position to positive position, as the Ministry of Finance allocates capital for flood prevention and other major works when any official plan is yet to be developed at the beginning of the year. In general, the allocation of capital from the State budget for capital construction works in agriculture and irrigation in particular has created favorable conditions for accelerating the implementation of projects, so that they may become operational soon to produce high socio-economic effectiveness.

Figure 5: Investment structure for irrigation

Investments for the period of 96-99



Investments for the period of 2000-2003



Constraints:

Under the strategy on irrigation development for the period of 1996 - 2000, VND 4,500 billion, of which VND 3,500 billion is managed by central agencies, is needed for upgrading the existing irrigation work in the 1996-2000 period. This figure for the 2001-2005 period is put at VND 6,000 billion, of which VND 4,000 billion is managed by central agencies. In fact, investment from the State budget in the 1996-2003 period, met only 60% of the demand. The largest amount of investment from the State budget was put at VND 2,300 billion in 1999, meeting only 70% of the demand. Even though, investment from budget in the 2001-2005 period tends to fall, from VND 1,819 billion in 2001 to VND 802.5 billion in 2003. As investment is short and major targets cannot be cut, outstanding debts can be seen in investment. Statistics show that outstanding debts in capital construction in irrigation have reached VND 800 billion, so far;

Investment remains scattered. In 1996 there were 146 irrigation works. This figure was put at 167 works in 2003, with works in Group B and C (developed by localities) accounting for more than 80% and most of them had longer time's construction then stipulated.

Capital allocation according to regions has yet to ensure equality and suitability with the strategy on agriculture development according to regions. The northern mountainous

region and the Central Highlands, which are prioritized to receive investment capital under the State's policies, in fact have their investment capital accounting for between 3.5 and 7% of total investment in irrigation.

The implementation faces many obstacles, especially in preparation and development of projects, evaluation and approval, compensation and site clearance, bidding and project management, which has slowed down the implementation of projects and expanded time for the project completion. As a result, the disbursement for projects is slow, producing negative impacts on the effectiveness of capital use

4.1.2.2 Water provision

Current situation

In 1999, 21,177 irrigation schemes of various kinds are seen across the country, of which there are 1,957 reservoirs with a capacity of 300 thousand cubic meters, over 3,000 big-scaled irrigation gates of all types and over 10,000 medium- and big-sized water pumping stations with a total capacity of 24.8 millions of cubic meter/hour and over 1,000 big-sized irrigation channels with thousands of kms of channels and 8000 kms of counter-flood embankment for summer-spring paddy seasons in the Mekong Delta and 755 thousands of small- and medium-sized pumping machines procured by cooperatives and farming households.

Of which, farming enterprises manage 19,391 structures, accounting for 91.6% of the total and serve some 80% of the total irrigated area. The remaining are the independent structures managed by individuals and organizations. The estimated value of all irrigation infrastructure managed by enterprises amount to 100 trillions VND (The total values of fixed assets of state irrigation schemes are estimated at 60 trillions dong (according to the 1998 price), excluding total fixed asset values of dykes and hydro electric factories)

Table 9: the Current situation of the irrigation systems

Criteria	*Unit*	*1999*	*2000*	*2001*	*2002*	*2003*
No. of irrigation works	Work	21,177	21,384	21,646	21,875	22,000
Of which						
Major irrigation works			*61*	*262*	*229*	*125*
Class 1 channel	Km	363	258	140.00	128	115
Of which concretized	*%*	*27%*	*26%*	*19%*	*22%*	*20%*
Class 2 channel	Km	6,000	2,772	3,547.04	1,264	1,329
Of which concretized	*%*	*37%*	*28%*	*50%*	*35%*	*37%*
Class 3 channel	Km	4,400	5,164	8,564.67	2,468	1,598
Of which concretized	*%*	*18%*	*25%*	*57%*	*38%*	*25%*

(Source: Department of Irrigation, MARD).

The irrigation sector not only serves the purpose of water supply and drainage for the agricultural sector but also of disaster prevention and supply and drainage of water for industries, services and inhabitants. By 2000, the total watering capacity reached 3.3 million ha of arable land; source capacity 1 million ha; drainage capacity in Northern provinces 1.4 million ha of natural area; and salt intrusion prevention 0.77 million ha. 1.6 million Ha of acid area in the Mekong delta was also upgraded. Table 9 shows that both the drained area and regularly watered rice area see an increase every year. In recent years, despite continuous

draught damages, the shortage of water only occurred in regions of bare or incomplete irrigation schemes.

Overall, the network of irrigation schemes was, to various degrees, established and properly distributed nationwide. It, therefore, has become significant technical infrastructure which directly served and protected production to ensure the livelihood of tens of millions of farmers and offered no less significant contribution to socio-economic development of the country.

Yet, the results achieved in the area of irrigation are not equal to fairly high levels of budget investments. At the national levels, the irrigation system is able to cover 50-60% of the total area as compared with the designed capacity. Notably, some irrigation schemes (mainly small sized ones) can meet only 25-30% of the designed capacity. Almost all big-sized irrigation schemes can ensure irrigation of 90-100% of the area. As this is done only with additional measures, it has driven up irrigation costs. What should be noted is that over the past time, these schemes have aimed only to serve rice production and can only irrigate 80% of paddy land and a small proportion for industrial crops and vegetables.

In 2001, as the world price of rice dropped, the State officially allowed farmers to use irrigated rice land for planting other kinds of crops. Given this important policy change, many irrigation schemes originally designed for rice plantation are not suitable for irrigating other kinds of crops or fishery.

Table 10: Annual irrigation situation

Unit: Ha

Criteria	*1999*	*2000*	*2001*	*2002*	*2003*
Natural area	10,469,000	10,449,000	10,452,000	10,454,000	10,453,000
Annual arable area	7,357,000	7,590,000	7,525,000	7,470,000	7,362,500
Drained area	973,860	1,596,241	1,497,520	1,498,260	1,849,555
Irrigated area	6,666,000	7,260,000	7,245,000	7,549,377	7,595,490
Rice area in the irrigated area	6,666,000	5,829,584	6,412,542	6,583,138	6,595,490
Fishery area			66,458		

(Source: MARD)

Policy and Institutional issues:

The Ordinance on Exploitation and Protection of Irrigation Schemes8 came into effect on July 1 2001. After more than two years, on November 28 2003, Decree 143/2003/ND-CP issued to guide implementation of this Ordinance, provide for *norms of irrigation fees* and levels of funds provided by the state to irrigation enterprises for implementing public interest activities, thus offsetting their loss of irrigation fees and extra work

- *The Ordinance and the Decree 143 offered new, progressive regulations on various issues including the levels of irrigation fees and state funds for irrigation management organizations/companies.*
- *According to the Ordinance and Decree 143, irrigation fees must be set according to proper levels of recurrent operation expenses incurred by irrigation enterprises under normal weather conditions; yet, capital investment is still fully subsidized.*

[8] The ordinance on Exploitation and Protection of Irrigation Schemes No. 32/2001/PL-UBTVQH10 dated on 4th April, 2001 issued by the Standing Committee of the National Assembly.

This Decree is totally different from the Decree 112 issued in 1984 concerning irrigation fees.

- *According to the Decree 112, besides fully funding capital investment, the State also covered 50% of farmers' recurrent expenses for irrigation. On the contrary, irrigation fees now increase twice the former ones according to the new decree. Another difference is that in Decree 112 irrigation fees were paid by a certain percentage of harvested crops in the irrigated land area while in the later Decree, they are now covered by the money earned in an irrigated area unit, with varying levels, depending on irrigation method, user and locality. Nevertheless, the levels of irrigation fees defined in the new decree are seen as pro poor (such as Northern mountainous provinces and Central Highlands). Especially, localities with severe poverty and disaster-hit provinces are to be exempt from fees or pay only lower irrigation fees. What is more, levels of irrigation fees can be based on the amount of water being used. This kind of arrangement will encourage users to be more economical with water as has been repeatedly proposed in various studies on irrigation sectoral expenditure.*
- *The state shall be responsible for providing additional funding for irrigation enterprises in case they have had to spend more than the set limits for the purpose of flood and draught prevention, incur losses in irrigation fee collection due to natural disasters, and significant improvements of irrigation schemes.*
- *Although the Decree came into effect right after it is issued, such provisions concerning irrigation fees and state funds have not been implemented because provincial people's committees are still at the stage of developing regulations to provide for specific levels of fees for their locality. Irrigation enterprises have, therefore, been charging irrigation fees as defined in Decree 112 by the Ministerial Council for 20 years up to now.*

Fund allocation issues:

Budget expenditure for irrigation includes expenses for both water provision and dykes. In the period of 1996-2003, about 88% of budget expenses used for irrigation were shifted to water provision (including non-agricultural drainage).

In 1980s, investment on irrigation often concentrated on large scale projects in deltas. Recently, irrigation investment focus has changed to major regions and mountainous areas (irrigation and small and large scale reservoirs in the coastal Midland, sewers and water control dikes in Mekong Delta), reducing newly-built schemes and improving the current irrigation system.

Management issues:

The Department of Irrigation under Ministry of Agriculture and Rural Development is the central organization functioning as the state manager of irrigation. It is responsible for developing the general policy framework and planning irrigation sectoral performances. It is also in charge of large-scaled irrigation projects and schemes. Apart from it, the provincial Departments of Agriculture and Rural Development are tasked with managing the system of irrigation schemes within their localities. The total number of irrigation enterprises (irrigation management companies/organizations) nation-wide are 181, of whom 3 are in charge of head schemes while the main inter-provincial channels are under direct management of MARD and the rest are of provincial management (Class 1, class 2 and the majority of class 3 channels). The entire number of state employees working in the sector reaches 18,240 people. A small

proportion of class 3 channels and interior fields are under supervision of commune authorities.

Class 3 channels are often located away from irrigation enterprises, yet they are quite close to interior field channels where farmers work everyday. Most of them are managed by irrigation enterprises; farmers pay little attention to them. Even in some areas, class 3 channels are excessively exploited and thus destroyed by farmers for water exploitation. As regard irrigation enterprises, they fail to supervise such channels on a daily basis and do not have sufficient funds to maintain the channels. Therefore, class 3 channels have fallen into a state of disrepair.

At present 13,273 co-operatives, boards, teams and groups in charge of provision of irrigation services and others including institutional water users, are important links between the government and households. Practical experience, in the past few years, shows that the model of farming households setting up their co-operative schemes for shared water consumption has proven their effectiveness. This has helped ensure a sustainable supply of water for users. However, an appropriate policy mechanism has not been available to build a legal framework for the development of such model schemes.

Capital issues:

Capital expenditures for irrigation works mainly come from the State Budget, and approximately a half of recurrent expenditures of irrigation management companies are fund by the State Budget too. Headwork and main channels are invested by the Government, and the rest are invested by provinces and local people. However, due to tight provincial budgets, works to be invested by provinces and jointly contributed by local people have not yet been done properly.[9] Therefore, most of invested irrigation networks have not been completed and synchronized, not yet operating at their highest efficiency (Department of Water management & Irrigation works 2003). That is why **irrigation systems in the entire country have just been operating at 50-60% of designed capacity**. Most of big-scaled irrigation systems have been operating at 90-100% of designed capacity, but they require additional measures (oil, private pumps), resulting in an increase in operation costs.

Investment capitals for irrigation account to about 94-95% of total annual budget for irrigation, and the rest is for recurrent expenditure. At present one outstanding issue is that **actual expenditures for operation and maintenance set by the Government (belongs to recurrent expenditures) are too low**. Expenditures for operation and maintenance is of 1.1% of total initial investment for irrigation works,[10] annually the Government has to spend about 1.1 thousand billions VND for operation and maintenance of fixed assets. Meanwhile, actual expenditures for this activity is just a half (500-550 billions VND per year).[11] Such expenditures are just enough for "repair where broken", and consequently current irrigation works are degrading quickly, resulting in a higher cost for operation and maintenance of the entire work. Although since 2001 MPI has considered operation and maintenance as a special expenditure and allowed a 30% -35% maintenance cost as a percentage of total public investment, MARD does not make this provision in its budget submission for infrastructure construction.

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[9] One example: the irrigation system of the Rac river of Ha Tinh province has operated for almost 20 years, but the sub-irrigation network invested by province and local people has not completed therefore the system is operating at 45-50% of the designed capacity.

[10] According to Circular No. 211/1998 dated on 19th February, 1998 of MARD. Besides, recurrent expenditure norms stipulated in Decision No.211/1998/QD-BNN-QLN of MARD can be applied, accounting to 23-28% of total recurrent expenditure.

[11] Expenditure for operation and maintainance of the irrigation sector in 1996 was 124 billions VND, in 1997 – 216 billions VND, in 1998 – 280 billions VND, in 1999 – 304 billions VND, in 2000 – 331 billions VND (at the 2000 fixed price). In total for a period of 1996-2000 total expenditure is 946 billions VND (Socialist Republic of Vietnam 2003).

To answer the question why expenditure for operation and maintenance is too low, it should review a structure of revenues and recurrent expenditures, and expenditure priorities.

The main revenues of irrigation management companies include: (i) irrigation fees from provision of irrigation services; (ii) the State's funds allocated by the Government to irrigation management companies for public works and other additional required tasks; (iii) other revenues collected from exploitation of irrigation works. Irrigation management companies have to use these revenues to sign contracts with water users and fulfill tasks of draught and water logged prevention assigned by the Government.

However, irrigation management companies have no authority and capacity to increase revenues from irrigation fees by setting fees based on irrigation levels. The fees are set by the Provincial Peoples' Committee with the approval of the Provincial Peoples' Council and are usually set at a compromise level below the irrigation management company's actual costs (at present Decree No. 112 is still applied) though collection rates are usually 80-90% of the contracts but such fees only meet 50-60% of the demanded recurrent expenditure of irrigation management companies. As for the State's funds, as stipulated by the Government, the State's funds must recover fully expenses of operations. In fact, the State's funds just only meet approximately 40% of the needed expenses, or in other words much lower than needed expenditure.

Recurrent expenditure for irrigation of Irrigation Management Companies includes: salaries and wages, and other salary-based fees; maintenance; payment for electricity for irrigation; management fees; and other expenses. In recurrent expenditure, payments for electricity take the highest proportion, approximately 40% of the total recurrent expenditure[12]. In years with severe weather, payments for electricity may increase 5-10% of the total recurrent expenditure. As explained above, expenditure for maintenance is only about 50% of needed ones. Because payments for salaries and wages are the first priority of recurrent expenditures, while payments for maintenance and operation of irrigation pumps are the less priority. Normally, the remaining budget for these items is just enough for repair and maintenance of broken irrigation works and partially for payments for electricity. This priority and insufficient budget have resulted in serious degradation and debts for electricity of irrigation works for years. Expenses for electricity are more costly because of a longer time needed to pump water from reservoirs to end users and higher places, or construction of intermediate pumping stations.

Evidence on impacts of investment for irrigation:

Thank to rapid development of irrigation in the Mekong River delta in 1990s, newly irrigated areas have increased, accounting to two third (2/3) of total newly-irrigated areas of the entire country. Thank to irrigation, structure of tree plantation, husbandry has changed rapidly into an intensive and extensive direction. Irrigation works facilitate for resettlement and fixed cultivation in mountainous areas.

An ADB-funded project to identify investment strategy for irrigation sector and other related projects in the central region show that out of 497 projects only 19 projects (3.8%) are considered that have achieved both objectives in term of economic effectiveness and poverty reduction and hunger eradication. Current irrigation upgradation and improvement projects (mainly irrigation channel concretization projects) often have better impacts to poverty reduction and hunger eradication, while new irrigation construction projects often yield higher economic effectiveness (Barker and partners 2002).

In summary, review of public expenditure for sub-sector of irrigation reveals the following outstanding issues:

[12] Except from the Mekong River delta, where most of irrigation system are gravity-based irrigation systems.

- *Investment policies and mechanism for irrigation are not consistent, either effective for ensuring a synchronized and closed investment at both central and local levels in order to make the fullest use of designed capacity. Decentralization of management and assignment of tasks have not come along with a sufficient budget for implementation.*
- *There is an imbalance between recurrent expenditure, upgradation and improvement, and investment for infrastructure that results in a serious degradation of irrigation works.*
- *Irrigation fees have just compensated for approximately only 50% of recurrent expenditure of the Northern irrigation enterprises. Existing subsidiaries do not encourage farmers to save water, use it effectively, and change to grow other higher-valued trees and animals. Though new legal documents have been issued, their enforcement and implementation are still slow.*
- *There is no suitable policy and mechanism in order to attract and mobilized maximum participation of different economic sectors and stakeholders (water users, private enterprises, individuals, FDI) and no legal corridor/platform for development of water users' groups/associations.*

4.1.2.3 Investment for rural infrastructure

Investments for rural infrastructure are a massive rural development activity at present in our country not solely managed by MARD. During the past years show that the Party and State have paid a very great attention to rural areas and many projects implemented by different sectors and levels to carry out rural development such as the illiteracy eradication program, Program for 2,715 poor communes, Program for clean water and rural environmental hygiene , Rural transportation program, etc.

As for rural infrastructural development, until 1997 MARD has just officially developed a project to be submitted to ADB for investments for rural infrastructural development of 23 poor provinces. Till then investment managed by MARD is set a separate expenditure item for the Ministry's plan.

Therefore, analysis and evaluation of public expenditure for rural infrastructural development is reviewed when the project (1997) under the public expenditure framework is managed by the Ministry, relating to local budgets granted to component projects.

4.1.2.4 Investment for Agriculture:

Investments for agriculture are managed by MARD: 1,536 billions VND accounting to 9.15% of the total investments for agriculture managed by MARD, out of which domestic investments, ODA are 966 billions VND, and 570 billions VND respectively. Domestic investments are accounting to 65,89%, additionally foreign investments have increased significantly, from 11 billions VND in 1996 to 82 billions VND in 2003. Investments for agriculture have increased through years, particularly in 2001, investment ratios for a period of 2000 -2003 after the approval by the Prime Minister on a seed, seedling, husbandry and forestry tree Program have increased 1.93 times compared with the period of 1996-1999. Investments for construction and installation are taking a higher proportion than those for equipment and facilities (63% is compared with 56%), investment for scientific studies is taking a small proportion of the total investments (18.14%).

Seed and seedling projects are taking a proportion of 31.1 % (if a period of 2000-2003 is counted, when seed and seedling projects are available, total investment for seed and seedling projects are accounting to 46.43% of the total investment for agricultural sector).

Study projects for agricultural investments are accounting to 18.14%. Other agricultural investment projects are accounting to 51.26% in which investment for Exhibition Trade Fair Center for agriculture - foodstuff industry is accounting to 9.87% of the total investment for agriculture.

4.1.2.5 Investment for Forestry

From 1996 to 2003 according to the plan, the State has invested a total investment of 2,063 billion VND from the Central budget, out of which ODA is of 1,071 for forestry sector. Investments has increased from 135 billion VND in 1996 to 329 billion VND in 2003 because many ODA programs and the 5-million ha new plantation (Project 661) have been implemented.

Table 11: Investment for forestry directly managed by MARD

No.	Indicator	Year								Total
		1996	1997	1998	1999	2000	2001	2002	2003	
	Total	**135**	**100**	**176**	**327**	**285**	**264**	**445**	**329**	**2,063**
1	Capital under Decree No.52/CP	0	10	28	88	66	53	199	40	484
2	ODA	88	67	92	170	127	148	162	217	1.071
3	Program 327	47	23	20	0	0	0	0	0	90
4	Project 661	0	0	37	69	93	63	83	72	417

(Data is different to table 4 because Program 327 and Project 661 are included. Data provided in the table include investments managed by MARD only)

Investment for infrastructure construction under the Decree No. 52/CP

Investments under the Decree No. 52/CP of the Government for forestry is not high, for a period of 1996 to 2003, total investment is of 484 billion VND, equivalent to 23% of the total investment for forestry and 2.73% of that of the agricultural and rural development sector. Such investment mainly comes from projects of Groups B and C, or national parks, natural conservation zones, or some forestry stations. Silvicultural investments are carried out through two Projects: Program 327 and Project 661.

Program 327[13]

The Program has been implemented from 1993 to 1998, in the entire country, with the total investment of 2,905 billions VND. The Program has achieved certain results such as: 1.6 millions ha of protection and special-use forest has been leased for protection; new plantation 638,000ha, regeneration 700.000ha; industrial and fruit tree planting 119,940ha; participating in construction of infrastructure and public works such as construction of more than 5,000km of roads, that of 86,400 m2 of health clinics, schools, and irrigation; big cattle husbandry 53,025 cattle; resettlement and migration to the project's areas 94,200 households; land reclamation 24,900ha, regeneration of employments and stable incomes for households, creating a basis for long-term, sustainable forest development and protection.

Though nearly additional 1.4 millions ha of forest have been planted, area of production forest is continuously reducing and farmers are still practicing slash and burn cultivation.

Some causes reduce successes of the Program:

[13] Decision No. 327/CT dated on 15th September, 1992 issued by the Chairman of the Ministerial Council (presently called the Prime Minister) promulgating on some policies on use of bare, denuded hills and mountains, forests, coastal alluvial areas and water surfaces.

- *Design of the Program 327 has not fully studied about market and not had any mechanism to ensure that timber products can be traded at suitable prices.*
- *Long growth circle of trees drives household , who are living in mountainous areas, into an early exploitation in order to meet their immediate food demand. In some places, plantation forest is replaced by industrial trees such as coffee, tea, or fruit trees.*
- *Participation of local people in setting up objectives of the Program is neglected. Such objectives are "top-down approach", unsuitable with specific conditions of localities and frequently changing overtime.*
- *Hand-over and devolution of land use rights to local people are slowly undertaken, especially in mountainous, remote areas.*
- *Investment funds are too spreading for many projects, consequently funds are too spreaded and lacking of funds to complete the set objectives. All projects are selected because they are ready for implementation but not thoroughly studied in term of priority, limitations and institutional capacity.*
- *Issuance of policies related to projects: Many policies and regulations have been timely issued, meeting the demand for management. However, study and issuance of investment norms and technical standards for forest plantation, regeneration and protection are low, inconsistent within an area, and slowly revised and amended.*

The 5-million hectare new plantation program[14]

The 5-million hectare new plantation program has been implemented since 1998 – 2010, following the project No.327, with the main purposes of promoting afforestation activities and increasing forest coverage from 28% to 43%. Meanwhile, the program is expected to establish firewood production zones for domestic consumption and materials for processing and exports, increasing incomes for people living in mountainous areas.

Till 31st December, 2003, a total capital of 3,579 billion VND, out of which the State Budget takes a leading role 1,786 billion VND, accounting to 49.92%, and the rest of local budgets is of 139 billion VND, accounting to 3.88%, foreign capitals 6.64%, owned capitals of enterprises 5.35% and capitals for natural resource taxes (revenues from sales of living trees) 2.82% (Table 6) has been invested. Credits for afforestation are of 1,123 billion VND, accounting to 31.38%, provided as loans by Corporations and companies under the MARD and Ministry of Industry.

Investments that are taken place at local levels are of 2,680 billion VND, accounting to 74.89% of the total, mainly invested in mountainous and Northern midland region 1,047 billion VND, followed by Northern Central region, Coastal Southern Central region and Central Highland, gradually reduced in the Red River Delta only 54 billion VND. (Table 11).

[14] Decision No./QD-TTg dated on 29th July, 1998 signed by the Prime Minister promulgating on objectives, tasks, policies and organization for implementation of the 5-million hectare new plantation program.

Table 12: Investment structure of the Project 661 classified according to management levels and regions

(Million VND)

Management level and region	Year					Total	Percentage %
	1999	2000	2001	2002	2003		
Total:	**595,529**	**664,262**	**642,568**	**817,059**	**860,133**	**3,579,551**	
A. Central level:	**106,905**	**146,901**	**184,762**	**240,588**	**219,643**	**898,799**	**25.11**
- MARD	69,211	92,561	63,429	83,090	68,657	376,948	10.53
- Ministry of Defense	6,000	7,550	7,500	6,098	10,240	37,388	1.04
- Ministry of Police	1,284	1,780	1,715	2,185	4,120	11,084	0.31
- Ministry of Industry	28,478	43,790	110,218	146,701	133,026	462,213	12.91
- Ho Chi Minh Central Youth Association	1,932	1,220	1,900	2,514	3,600	11,166	0.31
B. Local level:	**488,625**	**517,361**	**457,806**	**576,471**	**640,490**	**2,680,752**	**74.89**
1. Northern mountainous and midland region	204,651	181,745	180,474	205,362	275,026	1,047,259	29.26
2. Red River delta	9,918	8,686	9,486	11,179	15,083	54,351	1.52
3. Northern Central region	111,603	99,328	61,712	86,250	105,350	464,242	12.97
4. Coastal Southern Central region	62,684	66,519	80,497	76,272	97,795	383,766	10.72
5. Central Highland	49,377	78,044	82,921	133,631	43,567	387,540	10.83
6. South Eastern region	22,477	22,168	11,493	27,779	28,021	111,938	3.13
7. Mekong river delta	27,915	60,872	31,224	35,998	75,647	231,656	6.47

Table 13: Budget structure of the Project 661

(Million VND)

Year	Total	Central budget	Local budget	Credit loans	Foreign loans	Owned capitals of Enterprises	Capitals generated from natural resource taxes, revenues from sales of living trees
1999	595,529	325,683	18,881	138,472	58,210	32,653	21,630
2000	664,262	320,454	16,775	185,764	66,479	52,506	22,284
2001	642,568	328,829	22,787	234,167	28,591	13,083	15,111
2002	817,059	357,110	31,171	343,054	36,364	17,744	31,616
2003	860,133	454,873	49,288	221,934	48,000	75,621	10,417
Total	**3,579,551**	**1,786,949**	**138,903**	**1,123,391**	**237,644**	**191,607**	**101,058**
	100.00	49.92	3.88	31.38	6.64	5.35	2.82

Source: Forestry Department

Many encouraging results have been achieved: lease for protection 2,701,791 ha, new plantation 534,360ha, assisted regeneration 699,000ha, afforestation for industrial materials 443,833ha, plantation of industrial trees 76,269ha and that of fruit trees in forestland, job creation for households and contributions to stabilization of socio-economic situation. Forest coverage has increased from 28.2% in 1995 to 33.2% in 1999 and 36.1% in 2003. Forest fire prevention has been improved, the number of forest fires and losses have been significantly reduced, compared with the past.

Some outstanding issues in the forestry sector:

- *Land use planning: The actual areas for afforestation have not been identified and till now not yet sure that if land is available for plantation. Some areas have been used for agriculture or even for production of enterprises or managed by State Forest Enterprises for production and use.*
- *Low annual investment has not yet met demand of investment for the 5-million hectare new plantation program, the annual demand for investment is of approximately 550 billion VND from the Central Budget, but actually only 357 billion VND is provided. To fulfill the progress and objectives of the Program in the coming years, the Government must provide an investment of 673 billion VND from the State Budget.*
- *There are too many cost norms of the system and its suitability is not high, not ensuring equality for beneficiaries. The cost norm system varies between the Central and local levels, between expenditures of aids and domestic investments, etc.*
- *There are still too many outstanding issues in forestland management, particularly land allocation and lease of forest for protection, non-existence of economic motivations for forest owners to actively participate in protection, development, and business and production. There are still many shortcomings in the benefit sharing policy.*
- *The most basic principle (principle No.1) stated in the Decision No. 661 for forestry development is "People is a main force for plantation, protection, regeneration and benefiting from forestry occupations/activities", based on this principle land policy is very clear "allocation and lease of land and forest to people for long-term stable use, attached with granting for Land use Right Certificates, etc." But these principles have not been well implemented, resulting in many plantation forests without owners, even many areas of plantation forest have been destroyed by people to grow another crops.*
- *Afforestation has not taken people as a basic unit for plantation and benefiting. In most cases, project preparation and planning have not yet got people involved, project management units develop projects themselves. When capitals are leased by the central levels for implementation project management units hire people to do some works partially, and do not identify forest owners. Consequently quality of works is not high. Especially when the time for tending has gone, it is difficult to mobilize people to protect and prevent forest fire.*
- *Policy dissemination and propanganda on to people have not been well-done, many people are not fully and clearly aware of the State's policies.*
- *Bad afforestation planning: if the State's funds are released, many areas will be projected and planned as protection areas. However, when plantation is completed, people will cut plantation forest to grow another trees (in Bac Giang province, people grow litchi, in Dak Lac people grow coffee).*
- *Some local forest development units have not followed regulations of the sector. In some localities, exploitation of plantation forests is prohibited, but in practices and instructions from the Government as well, exploitation of plantation forest is allowed because many forests have not been well-planted and at present there are many high-valued trees but provinces do not allow to replace the old ones e.g. in Lang Son, Bac Giang provinces, etc.).*
- *State Forest Enterprises are managing a large area of forest and land but using ineffectively, slowly re-structuring organization and mechanism for operation, resulting in ineffectiveness. Meanwhile, people have abandon labors but do not have*

land or have land but are not able to access to any support from the Government for afforestation.

Evaluation of some investment policies for forestry sector

The State's investment for lease for protection of special-use forests and protection forests in very crucial and crucial areas at the investment rate of 50,000 VND/ha/5 years is too low and too short in term of investment time that makes it unfair with labors invested by people, who are leased with forest. Therefore bindings of duties and responsibilities of people, who are leased with forest are not substantive.

Forest quality is poor because investment is low (4 million VND/ha/ 3 years), resulting in a limited timber supplying capacity for the economy. Investment ratio for regeneration and additional planting of forestry trees for special-use forest, and very crucial protection and crucial protection forests and that of afforestation of special-use forest, and very crucial protection and crucial protection forests are 1 millions VND/ha/6years and 4 millions VND/ha respectively. Such investment ratios are much lower than those of other investment projects. Therefore it influences to the quality of plantation forest. This is a main cause resulting in a poor quality of plantation forests due to exclusion, depletion and lowering of some technical standards of technical procedures for afforestation making them suitable with the above-mentioned financial, investment ratios.

Percentage of capital for infrastructure compared with total investment of the project, which is 5%, is too low because features of special-use forest and projection forest is that they are locating in remote, difficult areas, which are difficult to access by roads and local people's low living standards. Such investment ratios make investment environment, which is difficult itself, even more difficult.

Project management expenses for a special-use and protection afforestation project is of 8% of the total project's investment (at the central, investment ratio is of 0.7%. At provincial, district, and *commune levels* is of *1,3% respectively. Ratio for local project owners is of 6%)*. The reality shows that such investment ratios are too low. Furthermore estimated costs for afforestation include only direct expenses but do not include general ones *(55% compared with expenses for labors)* hence such low investment ratios do not meet requirements of expenses for project management, making it inefficient for project implementation.

Benefit sharing and product consumption policies:

At present, rights of households, who are allocated, leased and contracted with forest and forestland do not yield any essential economic benefits for them except some areas, where forest and forestland are locating near to developed economic centers, but most of forest and forestland are locating in remote areas, where social, economic life is difficult and social culture is underdeveloped. Hence forestry products have not found their markets and if markets are available, prices of forestry products are too low and not compensating for initial investments and expenses of laborers. The reality shows that as for households, who are allocated, leased and contracted with forest and forestland, payments for lease of forest for protection of special-use and protection forests are their unique income *(payment of lease for protection is of 50.000 VND/ha/5years, regeneration with additional planting 1 millions VND/ha/6years, and forest plantation 4 millions VND/ha/5years)* while benefits from forestry projects are not available. This influences the forest quality and is a potential threat to a loss of forest when the time of lease is terminated.

As for production and scattered forests, products of two types of forests have to undergo such a difficult process before they are marketable. For example when forest reaches its mature age, if forest owners want to exploit forestry products, they must undergo through 6 gates *(Village –*

Commune - Field Forest Protection Officer – Agricultural and Rural Development Section - District - Department of Agriculture and Rural Development) in order to obtain a permission, later on harvested products must be checked by Forest Protection Agency in Field No. I - and checked by Forest Protection Agency in Field No. II - then an order for transportation is released. Hence in summary a product must go through 9 gates before it is marketable. Such constraints related to procedures for getting permission for exploitation, transportation and trading of timber of plantation forest create many difficulties, making a big loss for producers and consumers. This results in a reality that forestland has its owners but does not have any forest.

4.1.3 Focal target programs

Program designs and workload are determined by the central level but implementation is mainly by local levels.

4.1.3.1 The national program on clean water and rural sanitation

Target: By 2020: all rural people have access to fresh water of national standards with the minimum volume of 60 litre/day per capita, use hygienic latrine and practice personal hygiene, and maintain village and commune environmental sanitation. By 2010: 85% of rural residents have access to hygienic water with the volume of 60litre/day per capita; 70% of households and rural people use hygienic latrine and practice personal hygiene.

By 2005 or sooner, all kindergartens and other educational institutions, hospitals clinics, offices and market places in rural areas have enough fresh water and hygienic latrines. Household husbandry, large-scale husbandry and production in craft villages are kept under control to ensure village and commune environmental sanitation. Measures are taken against depletion and pollution. Qualities of ground waters and surface water in ponds, lakes, streams and rivers.

Total costs: about 50,000 billion VND.

Results of investment implementation

Table 14 Result of program implementation in related regions (accrued to 2002)

No.	Item	Rural peole having access to fresh water		No. of households hygienic	Having Latrine
		(Number)	Rates as of 2002 (%)	(No. of households)	Rates as of 2002 (%)
	Nationwide	**29,760,000**	**50**	**4,692,000**	**37**
1	Northern mountainous region	4,000,000	44	530,000	26
2	Red river delta	7,500,000	52	1.140,000	50
3	Northern Central region	4,400,000	48	1.100,000	45
4	Sea coast Central region	2,700,000	45	500,000	35
5	West Central highlands	1,100,000	45	157,000	27
6	Eastern South region	3,100,000	60	445,000	50
7	Mekong delta	6,960,000	54	560,000	22

- Results of investment implemented (1999-2002) : Total implemented capital: 3,160 billion VND, in which: program support funds: 600 billion, equivalent to 19% ; Supports

from other sources: 700 billion, equivalent to 22% ; international aids: 400 billion, or 13% ; Contribution of local people 1.460 billion, equivalent to 46%. The average amount per year was 800 billion, or 34% of needs (2,300 billion).

Water supply facilities: About 520,880 new facilities were constructed, providing water to 10.5 people. Until late 2002, about 50% rural population had access to fresh water, increased by 18% compared to 1998; the average increase was 4.5% per year, meeting 65% of the target.

Enviromnetal sanitation: About 1,228,000 latrines were constructed; the rate of households having hygienic latrines was increased to 37%, 10% greater than the rate in 1998, The average increase was 2.5% per year, meeting 65% of the target; waste treatment facilities were constructed in 516,500 livestock stables and sties.

4.1.3.2 Investment in agricultural processing units.

In the period 1999-2002, relevant enterprises invested 6,465 billion VND in agricultural processing units. In which, credits accounted for 2,470 billion. Combined with the previous investment, until now there have been 40 sugar mills with total capacity of 1 million tons per year, 40 rubber processing mills with total capacity of 270 thousand tons of latex per year, 70 tea processing factories with total capacity of 50 thousand tons of dried tea per year, 60 cashew processing units with total capacity of 220 thousand tons per year... which create jobs, increase agricultural product values and increase income for farmers...

A factory producing cassava starch with the expected capacity of 5000 tons per year in Ba Thuoc (Thanh Hoa province); an IQF freezing lines in Luc Ngan (Bac Giang), and a freezing warehouse for exports in Lang Son are under construction. 6 factories processing vegetables and fruits are completed increasing processing capacity by 15,000 tons of condensed pineapple juice, 10,000 litres of beverage and 8,000 tons of canned food per year. However, vegetable processing factories do not have enough materials. In forestry, Gia Lai MDF plank factory, Thai nguyen shavings plank factory and An Nhon wood processing factory have been completed. Besides those projects, in 2002, Me Linh silk unwind enterprise with the capacity of 50 tons per year were enlarged in 2002.

4.1.3.3 Breed program

Besides contribution to agricultural development, scientific researches and projects under the breed programs also contribute to:

In the period 2000 - 2003, the breed program was approved by the Government and its has contributed to changing perception of managers and producers in the significance of breeds as the premise of market oriented agriculture. Capital for this program is over 1,000 billion VND, in which investment capital is 600 billion (233 billion from central budget). The funds have considerably enhanced technical facilities and capacity in scientific researches and producing breeds. Collection, selection, import and preservation of plant seeds, livestock breeds and forestry seeds have had considerable achievements. At present, we have a genetic bank of high quality breeds from both inside and outside the country. Maternal and paternal breeds have been imported such as poultry and cows. Many plants have been imported, selected and tamed such as high quality rice, maize, potato, groundnut and beans etc. Many research institutes have received investment to have modern facilities which can meet the standards in producing high quality breeds. The system of multiplication and control of breeds also have been reinforced.

Selection, creation and import of breeds have been made to provide more original breeds to commercialized production: in scientific researches, the most notable achievements are new breeds of rice and maize, especially cross-bred rice and the new breed of cassava which can provide 2-2.5 - time - higher productivity, the rubber breed that can sustain pests

and strong wind. As of 31 December 2003, the breed program had asked the Ministry of Agricultural and Rural Development to officially approve 37 breeds and unofficially approve 66 plant and forestry breeds. In which, 6 high quality rice breeds are put into production, which provide 85 tons of super original rice, 2,020 tons of original rice, 95 tons of paternal/maternal cross-bred rice. 2 cross-bred maize breeds have been approved, 4 breeds of mango and 29 strains of asexual rubber have been experimented.

From original breeds, large volumes of commercialized breeds have been supplied to farmers. Projects under the breed program have produced and met about 30% commercialized breeds, contributing to improving productivity of plants and livestock.

Many scientific achievements have been proposed and applied such as the technology and facilities to dry paddy and maize; the research to produce pig and animal feed that can compete with foreign ones in terms of quality; production of short term breeds; production of vaccines, new drugs, and the procedure to prevent and treat diseases of livestock.

Laboratories have been improved with new facilities to provide better conditions for scientists in doing researches. Data collected from experiments are more accurate, which can better serve production and are applied in many regions.

700 m2 of laboratories, 18,000m2 of stable, 100 ha of pasture land, and 400ha experiment rice field have been upgraded. 15 rooms for tissues growing and 10,000m2 of seed preserving warehouse have been constructed.

4.1.4 ODA

Table 15: AID provided to MARD

No.	Contents	1,000,000 USD									Total (bil. VND)
		1996	1997	1998	1999	2000	2001	2002	2003	**Tổng cộng**	
A	B	1	2	3	4	5	6	7	8	9	10
1	**No. of work and projects**	**35**	**47**	**34**	**33**	**31**	**37**	**30**	**19**	**266**	
	Forestry	13	16	9	11	10	7	15	7	88	
	Agriculture	16	26	22	20	19	20	9	8	140	
	Irrigation	6	5	3	2	2	10	6	4	38	
2	**Total**	**193**	**196**	**390**	**148**	**178**	**272**	**199**	**31**	**1.606**	**24.895**
	ODA (loan)	2	118	327	102	43	118	124	0	834	12.926
	ODA (grants)	191	78	63	46	135	154	74	31	772	11.969
	Forestry	71	97	47	18	67	1	28	4	**332**	**5.150**
	ODA (loan)	*0*	*33*	*23*	*0*	*43*	*0*	*0*	*0*	*99*	*1.534*
	ODA (grants)	*71*	*64*	*24*	*18*	*25*	*1*	*28*	*4*	*233*	*3.616*
	Agriculture	16	97	238	23	93	70	57	10	**605**	**9.382**
	ODA (loan)	*2*	*85*	*204*	*0*	*0*	*47*	*54*	*0*	*392*	*6.078*
	ODA (grants)	*14*	*12*	*34*	*23*	*93*	*23*	*3*	*10*	*213*	*3.304*
	Irrigation	106	2	105	106	17	202	113	17	**669**	**10.363**
	ODA (loan)	*0*	*0*	*100*	*102*	*0*	*71*	*70*	*0*	*343*	*5.314*
	ODA (grants)	*106*	*2*	*5*	*4*	*17*	*131*	*43*	*17*	*326*	*5.049*
	Annual average investment									**201**	**3.112**

(Source: The Department of Finance- MARD)

In the period of 1996 - 2003, ODA (mainly loans) provided considerable capital to MARD, which was worth 7,084 billion VND, accounting for 42% budget of the ministry (see Table 2). The funds are focused on irrigation and forestry. ODA has affirmed its important role in public expenditure of MARD.

Inclusive of grants, during the period there were 266 programs and projects providing assistance to the agricultural sector with the total costs of 1.606 billion USD, equivalent to 24,895 billion VND (Table 14). According to Table 2, only 7,084 billion were accounted in plans, which was too little compared to the total amount. The main reason is that grants were managed by donors therefore could not be accounted in the Ministry's Budget. This is a problem which needs settling.

In forestry, project-based approach has been changed in to industry – based one (SWAP). This is a new trend in developing countries. However, for wide application in the agricultural sector, more detailed assessment and researches should be done.

Disbursement

Disbursement of grant medium size projects is generally satisfactory, which is made consistently with project designs, especially in the cases of projects managed by donors. Whilst, loan projects meet many difficulties, disbursement ratios are low which account for only 20 – 30% annual plans. There are even some cases where projects after 3 years of implementation have only 6% funds disbursed, or 2% of funds disbursed per year. The reasons are:

- *Disbursement is a complicated issue which relates to many stakeholders, management levels and depends too much on donors' procedures right from project design.*
- *Designs of some projects, especially those belongs to A group, are not fully appropriate to actual implementation, data and information in the pre-feasibility studies are much different from reality. Other have too complicated designs which relate to many ministries and sectors. Consequently, they need adjustment and approval for many times.*
- *Approval procedures of competent authorities form central to local levels do not meet time requirements. Many procurement packages have to be approved for many times. Project designs do not match actual conditions.*
- *Different donors have different disbursement procedures. Being aware of their procedures takes time. The Ministry of Finance has not developed a circular guiding the financial management mechanism applicable to all kinds of projects.*
- *Capacities of ministries related to projects are generally lower than the needed level. Most of accountants and procurement staff are recruited and trained when projects are formulated. They have to spend much time on getting familiar with projects' disbursement procedures. This situation is more serious in provincial project management boards.*
- *Payment in State treasuries take much time in many projects. The main reason is accountants do not have thorough knowledge on payment regulations. Treasuries often do not follow time requirements in the procedures in confirmation of payments and disbursement because they do not know ODA regulations and they are too busy with other works.*
- *Donors may be too slow in issuing "no objection letters". Some projects suffer from too many ties from donors. For example, in the forestry project "Coastal Wetlands Protection and Development" funded by WB, many components are allowed to be implemented only with participation of international consultants while the project had to spend many years on negotiation for signing contracts with international consultants.*
- *Disbursement must be approved by many managerial levels such as provincial treasuries, Central Project Management Units, and Ministry of Finance before*

submitted to donors. This is the cause of low disbursement at grassroots level. The procedures in the contribution ratios and payment of counterpart funds are burdensome.

4.1.5 Recurrent expenditures under the management if the Ministry

The procedures in preparing recurrent expenditure budget estimation of the Ministry of Agriculture and Rural Development follows the (amended) Budget Law::

Calculating estimation

- *Step 1: Based on verified data supplied by the Ministry of Finance (in mid June annually), the Department of Finance together with other functional units (as assigned by the Ministry) prepare the tentative allocation of verified and demanded budgets of beneficiaries (detailed by expenditure items of beneficiaries).*
- *Step 2: Based on the prepared estimation, the Department of General Finance prepared the overall estimation to be submitted to the Ministry and to Ministry of Finance to lhave materials for discussion round (at department level). After that, based on comments from the Ministry of Finance, the Ministry of Agriculture and Rural Development will make supplementation and adjustment before discussion round 2 (at ministerial level).*

Allocating estimation:

- *Step 1: Based on estimation allocated by the Government, the Department of Finance reports to the Ministry and cooperate with other functional units in preparing detailed budgets of each unit divided by quarter in a fiscal year and into 4 groups of expenditures and submit them to the Ministry of Finance for examination.*
- *Step 2: After the estimation has been examined by the Ministry of Finance, the Department of Finance submit it to the Ministry for allocating estimated budgets to budget beneficiaries within the Ministry.*
- *Step 3: Based on the decision to allocate budget estimation to beneficiaries, the Department of Finance are authorized by the Ministry to allocate detailed budgets to beneficiaries in kinds, items, categories and groups of items.*

The aforementioned procedures have helped avoid the previous quarterly allocation, but procedures remain too complicated and line ministries are not allowed to be active in allocation and adjustment of their own budgets.

Table 16: Recurrent expenditures in agricultural sector

(Unit: billion VND)

Total	***270.7***	***308.5***	***320.2***	***310.0***	***439.2***	***511.1***	***622.1***	***749.0***	***3530.8***
Economic administration	*91.9*	*109.3*	*114.9*	*85.8*	*110*	*150.3*	*213*	*284.2*	***1159.4***
Science and technology	*67.7*	*73.5*	*76.5*	*84.4*	*156.5*	*173.8*	*177.5*	*197.5*	***1007.4***
State management	*16.3*	*19.7*	*17.3*	*17.9*	*22.8*	*27.3*	*29.5*	*30.5*	***181.3***
Health adnistration	*6.3*	*2.8*	*3.3*	*5.2*	*10.5*	*13.2*	*14.5*	*16.9*	***72.7***
Training administration	*88.5*	*103.2*	*108.2*	*113.2*	*129.4*	*143.2*	*178.4*	*213.3*	***1077.4***
Water national program				*1.7*	*3.2*	*1.9*	*1.9*	*2.5*	***11.2***
Poverty reduction national program				*1.8*	*1.6*	*1.4*	*3.2*	*4.1*	***12.1***

(Source: MARD – Rural Survey)

Table 15 shows that total recurrent expenditures in the period 1996-2003 managed by MARD was 3,531 billion. Expenditures increased from year to year and doubled from 1999 (310 billion) to 2003 (749 billion VND). In recurrent expenditures, health administration, training administration and science and technology represent the highest ratios.

Table 17: Budget expenditure on salaries and operation-maintenance In agricultural sector, in theperiod of 1997 - 2002

(Billion VND in current price)

Year	Total recurrent expenditure	Salary	Operation-maintenance
1997	1.003	141	694
1998	1.099	168	708
1999	981	172	579
2000	1.212	249	665
2001	1.390	292	700
2002	1.641	292	892
Total	**7.326**	**1.314**	**4.238**
Change	**64%**	**107%**	**29%**

Source: Ministry of Finance (2004)

Table 16 shows the imbalance in recurrent expenditure between operation – maintenance and capital accumulation as a result of the focus on investment. I 5 years from 1997 to 2002, expenditures on operation – maintenance increased only 29% as most of expenditures were spent on fixed items such as salaries and others. At the same time, there is a tendency that local governments play more roles in managing recurrent expenditures. Excluding the aquacultural sector, total State budget assistance in recurrent expenditures was 1,641 billion VND in 2002. In which, 632.2 billion VND or 38% are managed by MARD, the remaining by local governments. Exxpenditures are on researches, target programs, national programs and on the administrative system.

4.1.6 Science and technology

The scientific research system of the agiculturl sector consists of 26 institutions in such fields as agriculture, forestry and irrigation with total staff of 7,000. Research institutions are mainly located in Hanoi, Hochiminh city and the surroundings. Some have regional branches or centers. The institutions are specialized in 7 groups based on products or subjects: food plants, industrial plants, vegetables and fruits, biotechnology, verification, pest control, and pedology.

Table 17 shows that recurrent expenditures on science and technology increase on a year to year basis. In particular, from 2001 the annual increase has been 11%-13% which meet commitment of the Government to ADB. Ratios of investment on researches on cultivation, husbandry, preservation and processing, forestry, and irrigation have been changed positively: food plants remain in focus. In early stages, investment concentrated on intensive cultivation, increasing crops, creating rice breed with high productivity, and applying cross-bred rice to meet food demands. Since 1999, focus has been on developing new breeds providing high productivity and high quality products for domestic consumption and exports. Expenditures on researching husbandry and veterinary have increased from 9,15% in 1996 to 13,54% in 2004, which create cross-bred pigs, lean meat pigs, sind oxen, cows, super meat and super egg poultry, feed formula, vaccines, raising process etc, making husbandry gradually become the main producer in agriculture. Increased investment in forestry and irrigation has contributed to stability in agricultural production, reducing damages of natural disasters.

Table 18: Structure of recurrent expenditures on science and technology

Unit: Billion VND

Contents	Year								Total
	1996	1997	1998	1999	2000	2001	2002	2003	
Total	***67.7***	***73.5***	***76.5***	***84.4***	***156.5***	***173.8***	***177.5***	***197.5***	***1007.4***
1. Industrila crops and fruits	*11.23*	*11.89*	*4.22*	*5.79*	*11.76*	*17.17*	*16.53*	*20.43*	*99.02*
%	16.58	16.17	5.51	6.86	7.51	9.87	9.31	10.34	9.83
2. Food crops	*19.95*	*23.28*	*23.36*	*26.27*	*38.85*	*36.15*	*29.81*	*63.18*	*260.85*
%	29.46	31.67	30.53	31.12	24.82	20.79	16.79	31.99	25.89
3. Husbandry - veterinary	*6.2*	*11.16*	*13.85*	*12.91*	*17.31*	*21.05*	*20.6*	*27.01*	*130.09*
%	9.15	15.18	18.1	15.29	11.06	12.11	11.6	13.67	12.91
4. Processing and preservation	*3.97*	*4.73*	*4*	*4.33*	*8.58*	*13.7*	*9.59*	*16.49*	*55.8*
%	5.86	6.43	5.22	5.13	5.48	7.88	5.4	8.34	5.54
5. Forestry	*8.4*	*7.89*	*9.57*	*11.05*	*18.83*	*18.2*	*12.5*	*29.16*	*115.6*
%	12.4	10.73	12.51	13.09	12.03	10.47	7.04	14.73	11.48
6. Irrigation	*7.07*	*9.84*	*12.76*	*9.97*	*18.61*	*15.79*	*23.04*	*28.14*	*125.22*
%	10.44	13.38	16.67	11.81	11.89	9.08	12.98	14.24	12.43
7. Others	*7.93*	*4.2*	*7.6*	*14.08*	*42.*	*51.8*	*65.43*	*13.07*	*112.31*

Investment in science and technology have intensive impacts on crop structure of food plants, industrial plants, fruits and husbandry, which gives rise to new occupations in rural areas. Many new breeds with high quality and productivity have superseded traditional ones. Research results in in changing crop and season structures in Mekong delta, the central region and Red rive delta have contributed to better exploitation or resources in rural areas.

Achievements in science and technology have been created and applied in production such as new crop and season structures, new breeds with high productivity that are suitable to different ecological conditions and can sustain pest, cross breeds, measure to protect plants, water ring technology etc. In recent years, together with efforts to increase productivity and production volume, in recent years, research institutions have focused on developing technologies in mechanization of agriculture and product preservation to increase labor productivity and product values and reduce after-harvest losses, which contributes largely to the production volume of processing industry. The average annual increase in the last years has been 9-10%.

Technology transfer to rural and mountainous areas plays a major role in improving education level so that local people can apply new technology. A series of projects in developing technology transfer models, improving local food production capacity, using sloping land, afforestation, developing household economy, creating economic restructuring, and applying new technologies have been applied nationwide.

Contribution of science and technology are considerable but remains low compared to the country's potentials. The main reasons are: *Expenditures on agriculture is very low, those on science and technology, though increase every year, cannot meet demands* of production development. Researches in recent years have been dispersed, which is extensive rather than intensive in quality of breeds, in processing and preservation technologies. The consequence is the low competitiveness of agricultural products in both domestic and international markets: low product quality, high cost prices, packaging and models are not suitable to tastes of customers. Agricultural restructuring is at a slow pace, there lacks proportion between cultivation and husbandry. In 2000, husbandry only accounted for 17.1% total agricultural production values, which meant that the target that husbandry plays the major role in agriculture is not met.

Creation of breeds for afforestation has many problems. In practice, many breeding plants used in State – owned afforestation come from private on-field nurseries, which work to provide as many breeds as possible to meet afforesting plans. In addition, creation of breeds is the most profitable in afforestation. Therefore contractors pursue quantity increases with little care on quality. Besides, breeds from State-owned large-scale nurseries (breed companies), though of high quality, have very high prices then do not sell well. Researches to select, create cross-breeds control standards and quality of breed are not paid due attention to by relevant agencies.

Researching and applying achievements in new technologies in agriculture play essential roles in improving and increasing quality and productivity of crops and livestock, through which, increasing competitiveness and accelerating market oriented production. International experiences show that scientific research has high rate of investment return. However, the paradox is that developing countries are spending minimal shares of their budgets on this activity. It is estimated that MARD only spends the amount equivalent to 0.1% of agricultural GDP on the activity.[15] This is very low compared to other developing nations (normally at 0.5% agricultural GDP - Barker and Associates 2002).

The needs on scientific researches on plants and livestock differ in different regions. Therefore, the research and development system and agricultural extension should be flexible to be able to meet particular needs.

With the current development trend, scientific researches and extension activities no longer belong to the State only. There should be an appropriate mechanism to attract different agencies, organizations and others at both central and local levels, from both inside and outside the country, from public sector and private sector, and beneficiaries.

MARD's research institutes have maintained longstanding relations with international institutions such as IRRI. Some donors and non-governmental organizations have also assisted Vietnam in training researchers. However, cooperation in other fields remains weak.

In order that science and technology become the leverage for the economy to develop comprehensively and efficiently, the State should invest more in the agricultural sector to improve facilities and capacities of research institutions and focus funds on such programs as: the program to select and create breeds of plants, livestock and forestry plants; the program on food processing and preservation; the program on food hygiene and safety, and programs on regional economic development...to create new breeds that are of low prices, high quality; and to create new irrigating, mechanic and processing technologies in order to meet the ever growing demends of agricultural production.

4.1.7 Agricultural extension

In recent years, when prices of some major agricultural products have fallen, agricultural diversification and improving product quality have become more and more important so that Vietnam can sustain current markets. Agricultural diversification, cultivating new crops and raising new livestock of higher values always go hand in hand with risks in production and marketing. Raising shrimp is an example. Agricultural extension plays the most important role in transferring technology to farmers and in directing output markets. Through appropriate agricultural extension activities, the State can minimize the risks of producers.

Institutional matter

[15] This figure does not include expenditures on agricultural scientific researches allotted to other ministries, expenditures at local levels (form provinces downwards), private expenditures and expenditures form other sources (like donors and FDI).

The national agricultural extension system has operated for 11 years and is organized in 3 levels: central, provincial, and district The national agricultural extension center at the central level is responsible for developing sectoral policies, strategies, and plans. Provincial and district agricultural extension centers are responsible for developing pilot models and transferring new techniques and technologies to farmers through extension activities and programs. However, there is a wide range of institutions specialized in pest control and veterinary treatment. Besides, there are others namely State-owned breed companies, provincial department of science, technology and environment, research institutions and centers of MARD, and universities. Domestic enterprises and assosciations (in tea, food, coffee, and cashew) and international ones (such as Bioseed, CP Group, PIC, Pioner) have ebullient agricultural extension activities as they are attached to clients and doing so is for their interests. Several non governmental organizations have helped Vietnam develop agricultural extension models. The private sector also joins these activities to enlarge their ranges of clients and business partners.

- *At provincial level, there are provincial agricultural extension centers in 64/64 provinces.*
- *At provincial level, there are district agricultural extension stations (520 stations in 637 agricultural production districts, or 81%).*
- *At commune level, there are agricultural extension workers (7434 workers in 10,502 agricultural production commune, accounting for 70.7%). However, many communes in remote areas do not have any.*
- *There are no available data on the number of agricultural extension workers at villages and hamlets, However, there are now 3,918 agricultural extension clubs established voluntarily with 176,300 members.*

In general, agricultural extension workers are limited in both quantity and quality. Workers at communes are not full time, and their qualifications remain low. Though 70% workers at provincial level are university graduates, most of technicians are not trained in agricultural extension. Consequently they are not specialized and updated enough. Compared to the year 2000, the State's agricultural extension system has been enlarged considerably. There is a worker (of provincial or district level) per 1,340 rural households (Dao The Anh and Hoang Vu Quang 2004), which mean the ratio has been reduced nearly 3 times compared to the year 2000. However, the figure remains far from the efficient level of **one worker per 500 peasant households.**

At present, there are 46,272 agricultural extension organizations established voluntarily by local people under various forms: clubs, associations, groups, and cooperatives. These forms are developed in the South, accounting for 85% of the total number. Many mass organizations also participate actively in agricultural extension such as Farmers' Association, Youth Union, Veteran Association, Live Ornament Association, professional associations (like gardening, husbandry, raising goats, raising bees etc.).

Agricultural extension activities of the State's system

In the period 1993-2000, the Government approved 27 programs (including 19 in agriculture and 8 in forestry). Those assessed as successful are programs on cross-bred rice (increasing productivity by 1.3 tons), cross-bred maize (increasing productivity by 1.7 tons, accounting for 65% maize area), crop restructuring, improving the ox herd, leaning the pig herd, developing Tam Hoang fowl, sugarcane, fruits, and forestry extension. The focal program in the period 2000-2005, that on breeds of plants, livestock and forestry has succeeded previous achievements, settled many problems, and improved technical facilities of research and breed multiplication institutes.

Besides, the State agicultural extension system has applied many other methods such as developing demonstration models, organizing training courses for farmers, organizing seminars and site visits, providing information and printing extension documents, and organizing contests to honor good farmers.

Cooperation of State's extension programs with other organization

State's agricultural extension programs at central and local levels have cooperated closely with 36 institutes, schools, and research centers to research and transfer techniques throughout the country to implement national agricultural extension programs, and assist these institutions to have expenditures to transfer scientific achievements to farmers. In this way, agricultural extension has become the bridge between scientific achievements and farmers. The pending problem in this cooperation is the legality and unclear responsibilities of agricultural extension and organizations that transfer techniques.

State's agricultural extension system has also assisted or cooperated with 19 enterprises specialized in certain products and breed provision to provide inputs and facilitate outputs for agricultural extension and product development programs. Costs are burdened by enterprises. Through which, more expenditures can be attracted to agricultural extension to complement budget resources.

State's agricultural extension system at different level play the main role in organizing activities, and transferring technologies and techniques of voluntary agricultural extension organizations established by local people.

State's agricultural extension programs in general have contributed largely to improving the education level of millions of people, swiftly put scientific achievement into practice, supporting restructuring and diversification of crops, improve productivity, quality and efficiency. However, agricultural extension activities have not been diversified; covered only the production stage and left the most important stages (marketing and after harvest). Some programs do not comply with needs of peasant in different regions. The current approach is mainly bottom-up and dispersed implementation. Little attention is paid to remote and special areas. The poor and ethnic minority people have little access because programs tend to work with farmers who have land, good knowledge and are good in doing business. The equally important is that products of some programs are not marketable, which make it difficult for farmers to sell their products widely.

Institutes and research centers have technologies and modern techniques. They do want to transfer what they have but do not have enough funds to experiment and apply scientific achievements.

Enterprises and non-governmental organizations are often successful in agricultural activities as they have adequate funds and appropriate approaches.

Extension clubs and relevant associations form the extension net at the grassroots level which work effectively. The main reason is that extension activities are based on voluntariness which are supported by members because they meet their demands. These organizations often do not involve directly to extension activities but encourage their members to cooperate or sign contracts with State or private agencies, and donors' extension projects to receive technologies, training and other activities. The most important is the voluntary extension grid can penetrate all groups of population which are of different social features in a way more intensive than the State system can do. However, activities of associations and mass organizations are all attached to services and do not have adequate transfering expenditures – they have to rely on contributions of beneficiariesi (MARD 2000).

Financial allocation

Budget for agricultural extensioninclude capital expenditure, recurrent expenditure, and expenditure for programs. At present, the majority of expenditures are spent on salaries of agricultural extension worker. The little remaining is for agricultural extension activities. Budget for agricultural extension programs have increased continuously from 14.3 billion in 1994 to 90 billion (about 6 million USD) in 2004 (excluding salaries and management costs)[16]. In the period of 1993-2000, total expenditures for agricultural extension programs was 700 billion (equivalent to 50 million USD), or 87.5 billion oer year on average; in which 200 billion came from central budget, 500 billion came from local budgets (MARD 2000). Besides, provinces also have expenditures on agricultural extension. Remote and poor provinces may receive agricultural extension funds from donors but they lack adequate capacity to perform activities. Annual budget of Thailand on this activity is 150 million USD (Dao The Anh and Hoang Vu Quang 2004).

Table 18 shows that contributions of farmers in models using central budgets (to purchase breeds, materials and facilities to develop demonstration models) account for about 20-24% program expenditures. The rest comes from State budget.

Table 19: State budget for agricultural extension activities

Unit: Bil.VND

	1999	2000	2001	2002	2003	**Total**
1. State budget	**86.2**	**108.28**	**156.02**	**196.01**	**186.12**	**732.593**
a) Central budge	26.7	29.296	43.62	66.009	68.4	233.985
b) Local budget	59.5	78.988	112.4	130	117.72	498.608
Salries	*2.5*	*34.551*	*59.327*	*61.511*	*45.183*	203.072
Extension ctivities	*34*	*44.437*	*53.069*	*68.49*	*72.54*	272.536
2.Contributions ofbeneficiaries	**7.9**	**8.5**	**13.086**	**16.5**	**17.1**	**63.086**
Total	**94.1**	**116.78**	**169.1**	**212.51**	**203.22**	**795.679**

With the level of budget expenditure on agricultural extension per each agricultural laborer nerely at 17.43 thousand VND, agricultural extension of the State system provide mosdest results. The area receiving agricultural extension accounts for only 0.06% total agricultural area and less than 0.5% of farmers receive training every year.

Most of expenditure for agricultural extension activities are at local levels. Expenditures of MARD are mostly recurrent ones on management and operation of central lvel and part of them is for local levels through nationa agricultural extension programs. To implement these programs, MARD assign tasks in the programs together with expenditues allocated directly to provinces, or MARD may enter into contracts with provincial agricultural extension centers.

Salaries of provincial and district agricultural extension workers come from provincial budgets. Provinces may use their budgets to conduct agricultural extension activites local farmers need but only within provincial budgets after deducting expenditures on salaries and programs mentioned above. Expenditures vary in different provinces from 200 million ot 1-2 billion depending on capacity of provincial budget. Poor province are hardly able to conduct agricultural extension activities on their own.

[16] Source: Đao The Anh and Hoang Vu Quang (2004).

Table 20: Results of agricultural extension in the period 1999-2002

	Unit	*1999*	*2000*	*2001*	*2002*	*2003*	Total
Cultivtion scale	ha	2,527		5,591		7,925	16,043
% in total agricultural area				*0.06%*			
No, of cultivation models	Model	1,250	1,370	2,040	3,100	3,775	11,535
No, of husbandry models	Model	1,450	1,600	2,406	3,600	3,200	12,256
No. ofpeasants trained	Tuns of peple	50,000	64,250	100,000	130,000	150,000	494,250
% of peasants trained in total agricultural people	*%*	*0.21*	*0.26*	*0.41*			

The above analysis shows that: there are two ways to increase the number of farmers benefited from agricultural extension: increasing State budget for agricultural extension (less feasible); or use State'budget resources as stimulus to other sectors and beneficiaries in joining agricultural extension activites; the second option is more efficient and helps enhance ownership and responsibilities of beneficiaries.

Budget allocation

In principle, designing agricultural extension is based on 2 criteria: demands of farmers on agricultural extension and natioanl agricultural extension strategy. However, because of limited budgets, programs are mostly operating based on direction of the central level (MARD and the Ministry of Science and Technology). Priorities in agricultural extension are sometimes not linked to sectoral strtategy and prioritized directions.

There are several problems on public expenditure:

- *State's agricultural extension services are limited. The poor and those in remote area do not much access to these services. Qualifications of extension workers remain unable to meet actual demands.*
- *Extension activities are not diversified, inappropriate to particular conditions at localities, do not cover such stages as post harvest and marketing. Products of some extension programs do not meet market demands.*
- *Cooperation between State extension programs with activities of other organization is still limited.*
- *Policies to attract private sector and beneficiaries in joining agricultural extension are not strong enough. The prevailing regulations have not made clear legality and responsibilities of partners to extension activities (the State, technology transferring organizations, agricultural extension units of farmers).*
- *Poor provinces have difficulties in increasing budgets for extension activities to meet particular needs though this this important in increasing incove and reducing poverty.*

4.1.8 Finance in administrative units having revenues

Financial mechanism of these units is regulated in the Decree No. 10/2002/N§-CP date 16 January 2002. After 2 years of implementation, (2002 - 2003) there are now some results. Until 2003, 95/98 units were given financial discretion in which 5 could self - finance. They have developed their internal expenditure rules, increased revenues and reduced expenditure

to increase income for staff, establish funds and supplement operation costs. Balance of expenditures and revenues after 2 years in 95 units is 138.874 billion, in which 45.8 billion is used to increase income of staff, 36.443 billion to establish funds (table). Income of staff increases by 0.5 – 1.0 time or even 3 times in some units.

In general, the prevailing financial management mechanism has provided a wider legal corridor for units in actively manage and use their financial resources, creating incentives for them to spend wisely and effectively. After 2 years of implementation, all units have fulfilled their expenditure assignments.

Table 21: Finance in administrative units having revenues

No.	Field	No. of units		Total revenue	In which			Total exp.	In which			Balance	Division		
		Total	Admin. having rev.		Service	Revenues from economic activites and techn.y transfer	Others		Service production	Expenditure oneconomic activites and techn.y transfer	Others		Increased income	Funds	Supplementing costs
1	**Health**	**9**	**9**	**13.326**	**13.300**	**0**	**26**	**5.830**	**5.830**	**0**	**0**	**7.496**	**1.632**	**285**	**5.586**
	2002			6.345	6.345			1.164	1.164			5.181	159	65	5.087
	2003			6.981	6.955		26	4.666	4.666			2.315	1.473	220	499
2	**Economic**	**19**	**19**	**206.503**	**76.899**	**41.458**	**88.146**	**180.770**	**69.880**	**37.589**	**73.301**	**25.733**	**14.458**	**8.391**	**6.636**
	2002			103.005	39.419	21.485	42.101	94.287	36.361	21.018	36.908	8.718	6.314	4.119	1.492
	2003			103.498	37.480	19.973	46.045	86.483	33.519	16.571	36.393	17.015	8.144	4.272	5.144
3	**Science**	**30**	**24**	**362.731**	**176.655**	**169.472**	**16.604**	**335.301**	**164.594**	**156.961**	**13.746**	**27.430**	**9.857**	**9.121**	**4.267**
	2002			168.353	75.420	85.068	7.865	156.802	70.741	78.875	7.186	11.551	3.122	4.826	1.800
	2003			194.378	101.235	84.404	8.739	178.499	93.853	78.086	6.560	15.879	6.735	4.295	2.467
4	**Training**	**37**	**36**	**222.050**	**105.398**	**0**	**116.652**	**143.835**	**101.194**	**0**	**42.641**	**78.215**	**19.888**	**18.646**	**49.518**
	2002			98.468	54.367		44.101	68.550	52.841		15.709	29.918	5.488	5.592	26.431
	2003			123.582	51.031		72.551	75.285	48.353		26.932	48.297	14.400	13.054	23.087
	Tota;	95	88	**804.610**	**372.252**	**210.930**	**221.428**	**665.736**	**341.498**	**194.550**	**129.688**	**138.874**	**45.835**	**36.443**	**66.007**

(Sources: Report on implememtation of Decree 10/2002/CP ndated 25/2/2004 of the Department of Fnance)

4.2 Financial Publicity

There are 200 cost estimation entities of level 2 and 120 cost estimation entities of level 3 that belong to MARD. Because of the large scale, financial pulicity in MARD has several difficulties monitoring at cost estimation entities. However, basically the Ministry has fulfilled all tasks to ensure financial publicity.

Publicity in cost finalization: to be implemented in the following order: based on the notification of cost finalization in writing sent by MARD to each entities together with requirements of settling pending problems, leaders of entities publicize the information in the nearest meeetings or at the biannual review meeting of the entities.

Publicity in annual cost estimation:

(i) Publicizing the estimated figure: MARD publicly notifies the estimated figure provided by the Mnistry of Finance to each entity based on implemented figure of the previous year and assignment of the current year. Upon notified, entities have to prepare the detailed cost estimation to be submitted to MARD.

(ii) Publicizing the annual cost estimation: based on MARD's decision to assign annual estimation of revenues and expenditures, the Minister holds a meeting to publicize the budget and assign vice minister in charge of relevant department and agencies to review the assigned budget. After having agreement between departments, the General Financial Department reports to the vice minister in charge and petition the minister for decision to assign cost estimation to each entity.

(iii) Based on the assigned cost estimation, leaders of entities publicly inform their departments to prepare the detailed cost estimation in purchasing equipment, large scale repair and small scale construction. Some entities have even have estimation of business trip costs, Kilometer – based norms of car using and norms in using telephone so that specific cost estimation can be made.

4.3 Assessment on efficiency and effectiveness of public expenditure

One of the important norms used in assessing investment efficiency is the co-efficient ICOR[17]. Barker and Associate (2002) estimate that ICOR rose from 4.2 in the period of 1995-1999 to 5.0 in the period of 1997-2001. It means that agricultural investment efficiency in the latter period decreased. The main reason is that although the share of expenditure on agricultural investment in agricultural GDP tends to increase, growth in agricultural GDP declines. It is obvious that more investment does not bring about corresponding growth.

The most important conclusion of Barker and Associates relating to agricultural investment efficiency is that ICOR should be maintained as low as possible. In a study on impacts of public investment program in the period of 1996-2000 on poverty reduction, Larsen and Associates (2004) also argued that Vietnam's high ICOR in investment decelerates poverty reduction in the period 1998-2002. Maintaining a low ICOR, i.e. improving quality of agricultural investment in particular, especially in irrigation, R&D and agricultural extension, and quality of investment in the whole economy, is an urgent issue in Vietnam.

[17] ICOR cho ngành nông nghiệp có thể tính bằng tỷ lệ phần trăm của đầu tư cho nông nghiệp so với GDP nông nghiệp chia cho tăng trưởng GDP nông nghiệp bình quân trong một khoảng thời gian nhất định.

5 Recommendations and Policies options

5.1 Policies

To implement the aforementioned strategy, in the years to come, as agriculture shifts strongly to a commodity economy and integrates into the world economy and a new driving force stems from the interest of farmers and those workers who are directly involved in agriculture and rural development, it is necessary to effectively carry out already issued policies while at the same time studying to further complete and fine-tune existing policies and develop new ones as follows

5.1.1 Policies on various economic sectors

Encouraging development of household economy

To continue create favorable conditions and encourage development of household economy and provide funding for those households who are well-experienced and effective in doing business as well as possessive of capital and labor and to orient business and production development towards the farming economy model. The state will transfer land, give lending, and transfer techniques and marketing and encourage farmers to acquire knowledge and experience in commodity production even from other countries in the region so as to bring in practical benefits for themselves and the society

The State and communities would provide assistance to poor households by providing preferential treatment in terms of access to loan and techniques. To expand irrigated land and provide material and inputs (seeds, fertilizers) and help build infrastructure so that they could quickly escape from poverty

Cooperative Economic Development

To facilitate development of cooperative economy and agricultural cooperatives by providing access to land on favorable terms to be used for construction of offices, storage houses and processing factories for agricultral, fishery and foresty products and garments and so on. To reserve a tax holiday, for the first five years since establishment, for newly-established cooperatives and cooperation groups. To provide them with amounts of capital suitable to their production and business scale on both a medium and long-term basis and help train cooperatives' cadrers. The State is also to provide partial funding for training so as to encourage cooperatives' cardrer to study.

State economic sector

For forestry and agricultural farming: the main objective is to enhance efficiency of the use of land and technical and physical infrastructure, capital and labor force of agricultural and forestry farming enterprises and create job opportunities and help increase income of staff's households. To widely apply the mechanism of contracting of land, fruit trees and livestock according to Decree 01/CP and to transfer and contract out forests and help farmers from enterprises and the region to strongly shift to provision of services. to transfer land to carders and staff's households for the economic development's purpose. Regarding state forestry enterprises, their funds of land and assets will be reviewed. To restructure those forestry enterprises currently in charge of managing land forest and forestry land according to the spirit of the Prime Minister's Decision 187 TTg dated September 16, 1999. To continue the change of production relations to

adap to actual production, rearrange forest and agriculture farms, improve production efficiency and better exploit land potentials.

For those state agricultural and rural services enterprises: to restructure and rearrange agricultural and forestry processing enterprises, equitize and diversify their ownership to ensure effective use of their technical infrastructure, capital and good implementation of their assigned tasks

- To consolidate big trade and services enterprises who are engaged in products of high socio-economic importance such as food, salt, rubber, coffee and tea and to develop various forms of business such as business contract cooperation, joint ventures and linkage between state enterprises and cooperatives, between farming households and a large number of small-sized businesses to ensure smooth movements of inputs and outputs for agricultural production, good living standards for farmers and especially ensure optimal consumption of agricultural commodities for farmers
- To consolidate big engineering and construction enterprises so that they could possess high technical capabilities and modern science and technology and further develop, thereby become the engine of industrialization.
- To consolidate and rearrange key public service enterprises who are involved in providing seeds, irrigation services, veterinary services, plant protection and salt. to closely link scientific research with business and production activities and promote quick application of technical advancement in production activities

Private economec sector

- The State encourages and create favourble conditions for the private to invest in midland , mountainous and coastal areas so as to develop and effectively utilize denuted land and bare hills and promote development of processing and handicaft industries but within the framework of specific projects

- For delta areas, to focus the private sector on developing the processing industries, building infrastructure, industries and animal husbandary on a big scale while using arable land only to a minimum

5.1.2 Market policies

Domestic market

To ensure free and easy flows of agricultural products within the country. In the years to come, to focus on developing roads, storage facilities and stations and procure advanced technology and transport facilities and organize input and agricultural product trading centers, trade fair and exhibition, to enhance marketing and promotion activities. To encourage every segment of the society to engage in circulation of goods. To invest in developing the market information system and agricultural quality management systems

On overseas markets

- To identify goods that the country has a comparative advantage in, invest in increasing the quality of goods to gain and maintain a greater market share for each export product. To enhance trade promotion activities under various forms: by organizing exhibitions, organizing customers' meeting, negotiating and signing trade agreements and phyto-sanitory and vetenerery

protection agreement and quality conformance agreements. To develop a mechanism of ensuring civilized business behavior and keep up the faith in relations with business partners, to create conditions for our products to access the market in a sustainable and stable manner and increasingly enhance their competitiveness in the international market

- To carry out the policy of encouraging every economic sector to participate directly in exporting and to create favorable conditions for businesses of all economic sectors to expand their export market and to enhance diplomatic services in favor of economic development

- To ensure imports of sufficient essential inputs and goods to serve production. To protect domestic industries in an appropriate way and within a set time frame, regarding a few of products and inputs which are the potential alternatives to imported like products. To import cheap technical materials, seeds and equipment for serving domestic production

Effective organization of sectoral business associations

To develop the policy to create favorable conditions for the sectoral business associations to effectively support businesses, households, individuals and the private sectors so that they could engage in business and production efficiently

5.1.3 Land policies

- To create all possible conditions for peasant to use land as the most productive resource. To mobilize resources from the public so as to ensure effective development and utilization of denuded land and bare hills in midland, mountainous and riverside and coastal areas

To encourage farmers to tranfer their land so as to minimize land fragmentation. based of economic effeciency, land users are to convert their land from plantation of agrcultural and foresty crops into other kinds of crops, from ariculture to foresty crops or fishery development or vice versa. Yet this must be done according to the common master plan and in a way that ensures the benefits for the community

- To develop industries, handicafts and services and redistrubute labor and regular the transfer of land use rights as apppropriate

5.1.4 Investment policies

The State should increase budget investment in agriculture and rural development to correspond to the the sector's importance and position in the national economy, ensuring appropriate decentralization between MARD and localities.

Increase investment in forestry in order to complete the Project 661 in 2010 as planned. There should be a detailed study on norms and unit prices in afforestration, benefit policies and market policies.

Irrigation: Continue the priority given to irrigation, considering it the top measure to stabilize and develop agriculture. Investment structure should be: increasing investment in rehabilitating and upgrading existing irrigation works; giving priority to Northern mountainous regions, central highlands and several province in the Central region to contribute to poverty reduction; In stable region like Red river delta or Mekong delta, investment should be attached to

reation of market – oriented products (high quality rice, shrimp, fish…) or may be used for re-borrowing purpose.

Increasing the share of recurrent expenditure in irrigation to the maximum possible (35% as regulated by the Government)). In exploiting irrigation work, there should be new mechanism, turning irrigation enterprises into State enterprise providing public services (not public interest enterprises) so that the enterprises have to compete for providing public services. The Government subsidizes the services i.e subsidizes the beneficiaries other than currently subsidizes the enterprises.

Increase budget for researches and assign the disbursement responsibility within mid - term expenditure framework, and at the same time reduce the number of research institutions. ADB is assisting the planning and implementation schedule;

Increase central and local budgets for profession agricultural extension services. The expenditure on these services should be separated from recurrent expenditures.

5.1.5 Policies to mobilize financial resources

Capital mobilization

Utilizing compulsory funds mobilization though the policies on taxes, fees and charges, and utilizing non-compulsory forms such as selling and leasing land and other resources, voluntary contribution or investment to mobilize idle capital.

Continue the policy of developing a multi-sector economy, create all possible conditions for enterprises and the public to invest in agriculture and rural areas. Continue the promotion of equitization.

Continue the mobilization of ODA: it is estimated that the demand in the agricultural sector is about 1 billion USD per year, in which 100 billion per year is under the management of MARD.

Further promote investment both inside and outside the country in difficult areas in midlands, mountainous and sea coast regions to better exploit bare lands and wter surface using post – investment incentives.

Continue the policy of sharing responsibilities between public and private sectors, between central and local levels:

- For the State, it is necessary to develop and implement those policies aimed at encouraging farmers and all economic sectors to effectively invest in business and production development in the agro-forestry sector
- The State would invest its budgetary funding in developing infrastructure, including irrigation schemes, commune transport roads, commune low-voltage roads, clean water projects, schools, hospitals, protection and development of special use forests, protection forests and anti-disaster structures, environmental protection as well as develop public services such as agricutulral extension, forestry extension, plant protection, venetary protection, community-based water provision as well as scientific research and techological transfer and product quality assurance.
- The state should increase budgetary funding for agriculture and rural development to ensure that each year, some 6000-7000 billion dong would be invested and reasonably allocated to ministries and localities. More investment should be made in building more

irrigation schemes and water provision projects for crops according to each region's comparative strength and in mountainous areas. At the same time, the State should substantially increase investment in developing research capabilities of various relevent research institutes so that they could come up with good-quality seeds and proper product processing and preserving technologies. More invesment should also be made in laying the foudations for marketing activities and trade promotion and enhanced plant and venetary protection. Some 1000 billions dong should be invested in scientific research and staff training, especially with focus on highly-qualified staff and other economic activities

- For the public, it is necessary to focus on production development and rely on capital from all economic segment of the society and bank loans.The public should also be held accountable for their own production and business effeciency. To encourage beneficiaries to actively participate in the sactor and there should be consideration on increasing investment norms and fine-tune benefit policies.
- The Government supports part of costs, local people contribute materials and labor to build rural and agricultural infrastructure (in-field irrigation, rural transport, public interest works).

Allocating and using financial resources

Ffinancial resources in agriculture are diversified, including State budget, State credits, commercial credits, foreign investment, ODA, local people's voluntary contributions. To have the most efficient investment, these sources should be well coordinated and supplemented one another to utilize advantages of each sources in order to meet the overall demand of the sector in production and development.

To be successful in mobilizing resources and active in arranging the use of resources, the State should consider the development a midium term expenditure framework to enable finance in many years.

5.1.6 Farmers, agricultural credit policy

Investment credit loans:

Loans with preferential interest rate: are mainly projected for the poor, the natural disasters-stricken people, the afforrestation activities in the 5m ha of forest, and for some other special needs. Voluntary credit assistance among the poor, organized by common people, with the help of several socio- politic organizations is especially encouraged

Commercial trading credit:

Depending on products' type, the grace period is differently applied. It is intended for every businessman. Mid-term and long-term loans are increased.

5.1.7 Sponsoring policy

Social insurance:

Studying the policy in the way that taxes are made free or used for rural infrastructure construction, aiming at enhancing risk prevention and limit ability, setting up production

insurance funds (natural disasters, epidemics and prices) with the attendance and contributions of beneficiaries

Social sponsor:

Intensify the building of public welfare organizations such as kindergartens, clinics, schools, cultural houses and other infrastructures. Setting up farmers social insurance funds on the basis of ruled voluntary contribution..

5.2 Institutional issues

- Checking, strengthening state agencies on agriculture and rural development in parallel with clarifying and modifying positions appropriately; intensifying decentralization; supervising production organizations, especially state-run agro-forestry collective farms, processing units, and irrigation works in order to link producing, services, processing and consuming in individual locality, paying due attention to staff train, providing more means of transportation, ensuring the effectiveness of all agencies, especially grass- roots.(districts and communes). To accelerate administrative reforms: in particular, continue the improvement of staff qualifications through training, visit and developing standards for civil servants.

Continue to finalize legal basis and intensify the implementation of promulgated law and policies.

Promote the ability of comprehensive study on agriculture and rural areas; pay proper attention and timely finding out new factors. Research, build and summarize appropriate management organizations models.

Realizing democratic regulations, promoting power of public, socio-politic organizations, rural unions and occupational associations.

5.3 Financial management

Gradually improve finance, increase financial transparency, publicity and the evaluation system through such tools as financial auditing and consulting. Review economic and technical norms, financial regulation; rationalize business and production process ; complete internal accounting and statistics ; develop am appropriate assignment mechanism, practise thrift in all fields ; gradually arrange and rationalize entities; settle poblems arising form the arrangement and change of entities, especially policies on laborers.

Correct the observance or current financial management mechanism (confirming capital, receipt, documents, cost finalization…) on project management units (especially in projects using grants).

ODA projects and programs: Harmonize norms and procedures between domestic projects/programs and projects/programs using aid; create a level ivestment climate, alleviate problems in project implementation, accelarate disbursement. :

- *There should be training on procedures of disbursement, procurement and financial management for project accountants, especially in managing commune development funds- an issue new to almost all inexperienced accounts. Strengthen training to build capacity for project officers – which should be paid attention to in project preparation stage;*

- *There should be detailed studies to devise the method to make plan, revenue and expenditure recording of State budget regaring grants.*
- *The ministry if Finance should issue soon a circular guiding financial management in ODA projects.*
- *The central level should have experienced project staff who can fulfil their own tasks and support provincial project management units.*
- *Regarding beneficiaries : it is possible to implement the model in whcih each household is given a bank account to facilitate payment for labor. All payments for labor of households will be sent once into the account, avoiding intermidiary layers and controlling corruption and waste.*

The State (the Ministry of Finance) should finalize the list of budget which can facilitate other ministries in planning and monitoring public expenditures in their own fields. In particular, reforms should be done to procedures and process in allocating and managing investment which are now complicated and cumbersome. The process to approve internal expenditure in administrative units.

5.4 Optimise the information, monitoring and evaluation systems

Modernize the expenditure monitoring system at central and provincial levels, which will help closely monitor big investment and assess expenditures in correspondence with impacts and outputs. Establish an independent evaluating agencies reporting to MARD to evaluate and analyze impacts and examine new investment proposal (the agency is not to have implementing functions). Current assessments are subjective of which data are not reliable, therefore impacts analysis should be more quantitative so that assessment can be more accurate and persuasive in mobilizing further aid. Technical assistance program can be used to provide training on analysis. Thus, to have good assessment and researches, more financial resources should be poured into this mission.

Modernize and improve financial management capacity of MARD, establish the financial database of the whole sector and ask the Ministry of Finance to share with other ministries data on public expenditures. There should be a periodical announcement of data/information or easy access to database of institutions under the Ministry of Finance (treasuries, ministry/department of finance).

Publicize database on expenditure and output, conduct impact assessment to improve transparency and quality of data and create an objective database. Create an open dialogue mechanism with the public to improve current measures based on valuable comments.

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