SUMMARY

The paper presents an overview of public and private investment in agriculture in Vietnam and proposes key recommendations for encouraging investment in the sector in the coming time. The study employs secondary data from various reports and surveys, and key informant interviews with 12 investors in agriculture in Northern Vietnam. The results show that public investment in agriculture grew at a rate of 17% during period 2000-2010, however its share in total public investment has been decreased from 12.2% in 2000 to 5.9% in 2010. Irrigation has been the top priority which took about three-fourth of total investment, followed by agriculture production (seed, breeds and other services), and R&D. Non-state investment in agriculture has been increasingly important, with share of 64% in total country investment in the sector and number of private agricultural enterprises peaked to 1,153 in 2006, accounting for 54% number of agriculture enterprises. FDI in agriculture has reduced sharply recently and accounted for only 0.5% of total FDI in Vietnam. Main investors in agriculture focused on agro-processing and inputs for agriculture production. Seven factors affecting business climate for investors in agriculture in Vietnam were identified, which are related to land, infrastructure, credit, material supply, labor, macroeconomic environment, and legal framework. Recommendations for improving the business climate for investors in agriculture were proposed accordingly.
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Part A. Overview of the Report

A.1. Introduction
Investment in agriculture is seen as a sources of the sector and economy growth in developing country (FAO (2004), IPFRI (2010)). FAO(2009) indicates that there had been a global slowdown in the rate of accumulation of capital stocks in primary agriculture. The capital stock in agriculture grew annually at 1.1% during the period 1975–1990 and the rate dropped to 0.5% during 1991–2007. In a number of countries like India and Thailand, investment in agriculture has increased in
absolute term but declined in share of total investment. The trend is alarming because developing country is largely agriculture based. Fan and Rao (2003) also show that public investment in rural areas has stagnated in recent years in many developing countries and its share of total government expenditure and of agricultural GDP has fallen. The decline in agriculture investment is driven partly by rising need for other sectors in structural adjustment programs and low priority attached to agriculture since the mid-1980s by many governments and donor agencies.

In Vietnam, agriculture sector shares more than 20% of GDP but more than 60% of population lives on it. Therefore, government has considered agriculture as the key sector to promote economic growth and poverty reduction. Remarkable successes in economic development have been achieved, with average annual growth rate of GDP about 7% during the last two decades. Poverty rate was reduced from 37.4% in 1998 to 14.2% in 2010 (GSO, 2011).

Investment in agriculture has been used by Vietnam government as a key instrument to achieve socio-economic goals. However, like other economies on transition, the country also faces problems in resource allocation for agriculture sector, especially with the target to develop a modernized industry sector by year 2020. The government also emphasizes the importance of industry and services sectors by setting a target to have contribution of 85% from these sectors to GDP by 2020 (Party Documents, 2010). This, coupled with government budget constraint and poor performance of many State-owned enterprises, implies that capital mobilization for agriculture could not be based solely on government budget and public sector. Therefore, non-public investment in agriculture has been received increasing concerns, especially by Ministry of Agriculture and Rural Development (MARD).

A.2 Aims and scope of the paper

The paper aims to:

- Provide an overview of agriculture and public/private investment trend in Vietnam
- Identify problems and constraints to investment in Agriculture in Vietnam
- Provide policy implications to promote public and private investment in agriculture in Vietnam

A.3 Methodology and sources

Definition of Investment: There are several definitions on investment. FAO(1999) defines “Agricultural investment refers to changes in the level of all inputs that augment agricultural production capacity. In addition to augmenting physical capital, the conservation of natural resources, knowledge and human capital development, rural infrastructures and post-production equipment also represent critical elements of investment”. Investment can also be understood loosely to be changes in public expenditure in support of agricultural production.

Zepeda (2001) defines investment is the change in fixed inputs used in a production process. In the most narrow definition, investment is the change in the physical
capital stock. An extension of definition of investment covers changes in comprehensive capital stock. This means agricultural investment should include improvements in land, development of natural resources and development of human and social capital in addition to physical capital formation.

The General Statistics Office (GSO) of Vietnam defines “Investment is expenses to increase and remain physical assets, in a given period. Investment can be seen through investment projects and national target programs mainly to increase fixed and change in inventories assets”.

Sources of data. Due to data availability on investment in Vietnam, the paper employs data from various sources, namely GSO, MARD, Ministry of Finance (MOF), and enterprises surveys. While GSO provides data on investment as defined, MARD and MOF provides expenditure data which is referred as public investment in agriculture. Private investment is not officially defined, collected and released by GSO, therefore enterprises’ capital is used as a proxy for investment.

Foreign Direct Investment (FDI) is collected from Ministry of Industry and Trade. Interviews are made with twelve investors in agriculture, using semi-structure questionnaires. KIP also is done with government line agencies (MARD). Information on interviewed enterprises are given in the table 1.

Table . Sample description

<table>
<thead>
<tr>
<th>No</th>
<th>Name of company/enterprises</th>
<th>Location</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pacific Company</td>
<td>Hoa Binh province</td>
<td>FDI (100%)</td>
</tr>
<tr>
<td>2</td>
<td>Hoa binh Agro-processing company</td>
<td>Hoa Binh province</td>
<td>Joint stock</td>
</tr>
<tr>
<td>3</td>
<td>Thanh Son company</td>
<td>Hoa Binh province</td>
<td>Private</td>
</tr>
<tr>
<td>4</td>
<td>Hoa Binh Sugar joint stock company</td>
<td>Hoa Binh province</td>
<td>Joint stock</td>
</tr>
<tr>
<td>5</td>
<td>Phuong Huyen seedlings production and trading limited company</td>
<td>Hoa Binh province</td>
<td>Private</td>
</tr>
<tr>
<td>6</td>
<td>Dong Giao foodstuff export company</td>
<td>Ninh Binh province</td>
<td>Joint stock</td>
</tr>
<tr>
<td>7</td>
<td>Hong Quang seed company</td>
<td>Ninh Binh province</td>
<td>Private</td>
</tr>
<tr>
<td>8</td>
<td>Thanh An ago-processing company</td>
<td>Ninh Binh province</td>
<td>Private</td>
</tr>
<tr>
<td>9</td>
<td>Huong Nam Mushroom Center</td>
<td>Ninh Binh province</td>
<td>Private</td>
</tr>
<tr>
<td>10</td>
<td>Van Dac Phuc Processing company</td>
<td>Hai Duong province</td>
<td>FDI (100%)</td>
</tr>
<tr>
<td>11</td>
<td>C.P. group</td>
<td>Hanoi</td>
<td>Transnational</td>
</tr>
<tr>
<td>12</td>
<td>Unilever</td>
<td>Hanoi</td>
<td>Global</td>
</tr>
</tbody>
</table>

Due to time limited, famers, as private investors, are not examined in this study. However, it should be noted that farm households and commercial farms have closely links to agro-processing companies as well as agro-input production and trading companies.
Part B: Overview of the agriculture sector

B.1. Agriculture sector performance

B.1.1. Agriculture production

Agriculture contributed nearly 40% country’s GDP during 1980s and the share has declined to about 20% in the last decade (Table 2). However, labor force in rural areas has not been moved by the same fashion. In 1985, labor in agriculture accounts for 73% total labor force, this figure has decreased to about 50% recently.

**Table . Structure of Vietnam’s GDP by sector (%)**

<table>
<thead>
<tr>
<th>Sub period</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985-1990</td>
<td>33.57</td>
<td>26.70</td>
<td>39.73</td>
</tr>
<tr>
<td>1990-2000</td>
<td>25.79</td>
<td>31.28</td>
<td>42.94</td>
</tr>
<tr>
<td>2000-2010</td>
<td>19.18</td>
<td>40.01</td>
<td>40.81</td>
</tr>
</tbody>
</table>

Sources: Calculated from GSO data

Despite that industry and services sectors experience higher growth rate (Fig.1), the growth pattern is more erratic than agriculture sector in the last two decades. Agriculture sector, therefore, is not only important in term of providing livelihood for large population, but also in terms of sustaining the economic growth as a whole. However, declining tendency of growth rate is observed in the sector, which was recorded at 4% during period 1995-2000, declined to 3.8% during the following 5 years, and dropped to 3.3% in the period 2006-2010 (MARD, 2012).

![Figure . Annual growth rate of GDP components (%)](image)

Agriculture has experienced structural changes. Crop production share in agriculture GDP has declined slightly from 62% in 2000 to 56.4% in 2010, combined with slowdown in growth. Livestock and fishery sub-sectors have become increasingly important, with contribution in agriculture GDP was 18.5% and 21% in 2010, respectively (MARD, 2012). The two sub-sectors enjoys high growth rate during the last two periods (Table 3)
Table . Growth rate of output value in sub-sectors in Agriculture (%)

<table>
<thead>
<tr>
<th>Period</th>
<th>Crop</th>
<th>Livestock</th>
<th>Forestry</th>
<th>Fishery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1995</td>
<td>5.9</td>
<td>5.8</td>
<td>0.3</td>
<td>10.7</td>
</tr>
<tr>
<td>1995-2000</td>
<td>6.5</td>
<td>6.3</td>
<td>3.2</td>
<td>10.0</td>
</tr>
<tr>
<td>2000-2005</td>
<td>3.5</td>
<td>7.1</td>
<td>1.4</td>
<td>12.2</td>
</tr>
<tr>
<td>2005-2010</td>
<td>3.7</td>
<td>7.0</td>
<td>3.1</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Sources: Calculated from GSO data

B.1.2. Export and Import

Vietnam has achieved remarkable growth in both production and export for key agricultural products such as rice, coffee, pepper, and fishery products. Agriculture sector maintains positive trade balance (Table 4), while net import of the country has been around 15%-20% of GDP recently.

Table . Import and Export in Agriculture sector (millions USD)

<table>
<thead>
<tr>
<th>Trade Balance</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>15,627</td>
<td>19,527</td>
<td>24,982</td>
</tr>
<tr>
<td>Import</td>
<td>9,514</td>
<td>12,158</td>
<td>15,935</td>
</tr>
<tr>
<td>Net Export</td>
<td>6,113</td>
<td>7,369</td>
<td>9,047</td>
</tr>
</tbody>
</table>

Sources: MARD(2012)

Export. Vietnam exports agricultural products largely in raw form or semi-processed form, mainly food crops, industry crops, and aquatic products. Export values of the sector in 2010 is about 7 times as high as in 1995, however the share in country’s export revenues has declined from 46% in 1995 to 23% in 2010. According to MARD (2011), total export revenues of agriculture, fishery, and forestry reached 19.15 billion USD in 2010, of which contribution from rice, fishery, and rubber is 17%, 26%, and 12%, respectively.

Import. Feed and feedstuff production takes the largest component in total import value of agriculture sector. In 2011, total value of imported feed and feedstuff is estimated to be 2.3 billion USD, accounted for 15% total import value of agriculture sector. Import of this item increases due to expansion of demand for meat and limited domestic capacity of producing feedstuff such as maize and soybean meals.

The second most important imported item is fertilizer, which accounted of 14% total agriculture import in 2010. Despite that Vietnam has invested in producing fertilizer, but the supply does not meet demand, especially Potassium.

Vietnam also paid about 1.3 billion to import wood and wooden products in 2010, which accounted for 8% in total agriculture import. Other main imported items in agriculture are cotton, oil, rubber, milk, wheat, and pesticides, which individually accounts for 5%-8% total agriculture import.

B.2. Subsector overview

B.2.1. Crop production

Food crops (Rice and maize) contribute largely to total value of crop production in the country with share of 67% in 1990 and 56% in 2010, due to more
emphasizes on higher-value crops. Industry crops (such as coffee, rubber, and pepper) have taken places with contribution of 26% in total cultivation GDP during the same period. During the last decade, total value of crop production grew at 3.6% annually, lower than overall growth rate of agriculture output (4.2%). This sub-sector is export-oriented with selected crops such as rice, coffee, rubber, and pepper.

*Rice.* In 1975, rice is cultivated in about 4.9 million ha and total paddy output was recorded at 10.3 million tons, which did not meet domestic demand. Irrigation system construction, technology development, and capital investment have contributed to rapid expansion of rice area, which peaked 7.6 million ha in year 2000. Rate of growth in rice area, however, has been slowdown to about 2% annually in the last five year. In 2010, total paddy output is estimated to be about 40 million tons, accounting for about 6% of world rice production.

Paddy is produced by a large number of households. Mekong River Delta is the largest producing region which contributes about 50% total output, followed by the Red River Delta (20% output). Production scale at farm level is very different among regions, with average size less than 0.2 ha in the RRD and 1.29ha in MRD (Ismard, 2011). While RRD mostly supplies rice for domestic consumption, more than 90% of produces in MRD is exported. Despite of growth in rice export, MRD farmers face problems of flood inundation, salt water intrusion, drought, and outbreaks of pests and disease. Aside, as fertilizer and chemicals represent about 30-50% total cost of production, farmers are still dependent on import. Historically, Vietnamese rice is evaluated lower quality than Thailand and priced lower, largely resulted from problems in both production and marketing. Thousands of farmers plant different varieties in fragmented small parcels. Most of them practice sun-drying, and rice is stored in very simple containers, resulting in both physical and quality losses. Dry paddy with different moisture content, maturity, varieties is sold to private traders/collectors, then moved to rice millers for husking and polishing, and handled by exporters.

Vietnam has been the second largest rice exporter since mid 1990s. In 2010, the country exported about 6.9 million tons of rice(Table 5), valued 3.23 billion USD. Main importers are the Philippines, Singapore, Malaysia, Cuba, and Indonesia.

<table>
<thead>
<tr>
<th>Year</th>
<th>Rice</th>
<th>Coffee</th>
<th>Rubber</th>
<th>Pepper</th>
<th>Tea</th>
<th>Cashew</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>1,988.0</td>
<td>248.1</td>
<td>138.1</td>
<td>18.0</td>
<td>18.8</td>
<td>19.8</td>
</tr>
<tr>
<td>2000</td>
<td>3,476.7</td>
<td>733.9</td>
<td>273.4</td>
<td>36.4</td>
<td>55.7</td>
<td>34.2</td>
</tr>
<tr>
<td>2005</td>
<td>5,254.8</td>
<td>912.7</td>
<td>554.1</td>
<td>109.9</td>
<td>91.7</td>
<td>109.0</td>
</tr>
<tr>
<td>2010</td>
<td>6,886.0</td>
<td>1218.0</td>
<td>782.0</td>
<td>117.0</td>
<td>137.0</td>
<td>195.0</td>
</tr>
</tbody>
</table>

Sources: Calculated from GSO data

*Coffee.* Robusta is mainly coffee varieties planted in Vietnam. Coffee production is boosted in 1990s, largely driven by high world price\(^1\). In 1994, Vietnam has 124,000 ha planted to coffee, which doubleb in the following two

\(^1\) Frosts in Brazil had pushed coffee prices through the roof to more than US$2,400/ton in 1995.
years, and quadrupled in 2010. Coffee output grew at about 30% annually during period 1995-2000, however fluctuated strongly with negative growth rate during 2000-2005 (Table 6). Total coffee output was about 1.1 million tons in 2010, 10 times higher as compared with year 1990. Coffee is mainly produced in Central Highland. Favorable natural conditions and cheap labor have largely made Vietnamese coffee advantage.

Table . Annual growth rate of output production of selected crops in Vietnam, 1990-2010 (%)

<table>
<thead>
<tr>
<th>Sub-period</th>
<th>Rice</th>
<th>Tea</th>
<th>Coffee</th>
<th>Rubber</th>
<th>Pepper</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1995</td>
<td>5.36</td>
<td>4.5</td>
<td>18.8</td>
<td>16.6</td>
<td>1.6</td>
</tr>
<tr>
<td>1995-2000</td>
<td>5.44</td>
<td>11.7</td>
<td>29.8</td>
<td>18.5</td>
<td>33.3</td>
</tr>
<tr>
<td>2000-2005</td>
<td>1.95</td>
<td>12.6</td>
<td>-1.3</td>
<td>10.6</td>
<td>15.4</td>
</tr>
<tr>
<td>2005-2010</td>
<td>2.22</td>
<td>7.6</td>
<td>8.0</td>
<td>9.4</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Sources: Calculated from GSO data

Coffee has become one of the most important agriculture products and export of Vietnam, and the most vibrant livelihoods for farmers in the Central Highlands - the region with highest poverty incidence in Vietnam. The value chain is comprised of many actors, from input suppliers (fertilizers and chemicals), farmers, collectors, processors, manufacturers, and exporters. High growth in coffee production is largely based on intensive farming and area expansion. Coffee growers now face a number of difficulties, such as increasing input prices, pest and disease outbreaks, water shortage (over exploited ground water), and weather. Overuse of these inputs has resulted in unsustainable pattern of development of coffee in Vietnam. Like case of rice, poor quality is a problem resulted from production to processing stages. Small scale of production (around 90 percent of coffee produces in area of less than 1ha) deters farmers from adopting advanced techniques in production and harvesting. For example, growers harvest coffee beans using a strip-pick approach, making rate of ripe coffee out of collected coffee cherries under 50% (IPSARD, 2010). Farmers also apply sun-drying for coffee beans without further sorting. Therefore, off-flavor, foreign matters, and percentage of broken beans are those representing bad qualities of coffee Vietnam. However, there is little of incentives to improve coffee quality in Vietnam from farmers to exporters (Global Donor Platform for Rural Development, 2011). Recently, MARD has implemented 4C program for sustainable development in the Central Highland, about 10% coffee area is certified sustainable farming.

Vietnam has become the second largest exporter in the world. In 2010, the country exported 1.2 million tons of coffee beans (Table 5). However, Vietnamese coffee is considered to be lower grade, therefore lower price than other exporters. Main importers are the U.S, Germany, Spanish, Italia, and Japan.

**Tea.** Tea area got doubled in the last two decades, which was about 130,000 ha in 2010, accounting for about 36% world tea area. Total production is recorded at 889,000 tons in 2011 (MARD, 2012). Yield improvement largely contributes to the output growth. Through various programs, MARD has introduced high yield tea varieties to replace local varieties, and encouraged
intensive farming. Tea is mainly produced in Northern mountainous and midland (72% area) and Central Highland (22% area).

Like coffee, tea is produced by a fringe of small farmers. There are several key actors in tea value chain: tea growers, collectors, processors, and exporters. Vietnam tea is also, unfortunately, evaluated lower grade in world market. Consequently, the country enjoys only 60%-70% world tea price. There was case in year 2007, collectors bought fresh tea leaves at very high prices but required low quality, by which the harvest destroys normal growth of tea plants and it took a long time to recover, and reduced yield by 30%. Meanwhile, processors could not buy tea leaves because of very high price set by other collectors. In 2011, “dirty tea” case resulted in bad reputation for Vietnam tea. Beside, intensive farming based on use of fertilizer and agro-chemicals also increase dependence of farmers on imports, and low quality of product, as well as environment degradation.

Vietnam has quickly upgraded its position in the tea world market, with its ranking sixth largest tea exporter. In 2010, total tea export is recorded at 137,000 tons. Main importers are Pakistan, Taiwan, Russia, and China.

**Pepper.** Pepper area has been expanded quickly from about 9,000 ha to 50,000 ha in the last two decades, mainly distributed in Central Highland and South East. Total production reached about 110,000 tons in 2011, accounting for about 37% of world production (VPA, 2012), positioning Vietnam the top pepper producer in the world. As more than 90% of output is exported, pepper production experiences quite erratic growth pattern and strongly influenced by world market. Black pepper price has increased continuously from 1,790 USD/tons in 2006 to 6,397 USD/tons in February 2012, encouraging farmers to expand production. Pepper production has evolved from traditional and extensive farming to organic farming, therefore Vietnam’s pepper quality has been improved. Some pepper areas have become old, giving low yield and low quality. Pepper growers now face threats of insufficient water, pest disease outbreaks, and calamities.

Vietnam became the top pepper exporter in the world in 2001 with total export quantity of 56,506 tons, accounting for 28% world pepper export. Pepper is exported to more than 80 countries in the world. Top importers are the U.S, Germany, Netherlands, India, and Egypt. During period 2000-2010, annual growth in pepper export is 13%.

**Rubber.** Rubber area and production in Vietnam has grown at rate of about more than 10% annually in the last two decades. In 1990, rubber production of Vietnam accounts for only 1% of total world major producers, and this figure increases to 6% in 2010. Vietnam produced about 760,000 tons of rubber in 2010, of which more than 90% is exported. Rubber is planted mostly in South East and Central Highland. Natural rubber export is estimated to be 782,000 tons in 2010, valued at about 2.3 billion USD. China and Malaysia are two biggest importers. Vietnam is rank fourth in the world for rubber export.
B.2.2. Animal production

Animal final products are categorized into three types: cattle (big and small), livestock, and non-meat products. There is almost no change in the structure of this sub-sector in the last two decades, with cattle production contributing 64% and livestock 17% in total output value. Meat production has been double in the last decade, of which about 75% is contributed from pig meat production. Almost animal final products are for domestic consumption.

Pig production. Demand for pork is increasing as pork represents more than 70% of total meat consumed in Vietnamese daily meals, and population is growing. Pig is raised in all regions, but most densely populated in the Red River Delta, Northern mountainous and Mekong river delta. Total pig meat production has been double in the last two decades, with average annual growth rate of 3.5%. However, unstable pattern of development is observed, with negative figures in some recent years (Fig. 2). Porcine reproductive and respiratory syndrome (PRRS) and foot and mouth diseases are those of main reasons for the instability.

Fishery.

Fishery output grew at about 9% annually in the last decade, majorily contributed from aquatic farming. In 1990s, catching activities dominated with contribution of more than 80% in total fishery output. However, aquatic farming has become more important, with contribution of more than 50% in total fishery output in 2010. Mekong river delta, North Central area, and Central coastal area contribute about 80% of total fishery output.

The sub-sector growth is largely driven by both increasing domestic and export demands. As income improved and growing awareness of food nutrition, domestic demand for fish, shrimp and other fishery products increases (Duc, 2011). Trade liberalization in Vietnam also has created chances for fishery export (as well as for other agricultural products). The production is characterized by a number of small farmers, of which about 70% are contract growers for processing companies. Fishery farmers now face a number of problems, such as fish seed quality, lack of capital, disease outbreaks, and residuals of anti-biotic in products. Basically, the actors in the fishery value chain include producers (farmers), collectors, processors,
wholesalers/retailers, and exporters. Historically, Vietnam fishery export experienced anti-dumping case with the U.S in 2002, and anti-biotic residuals in shrimp exported to Japan. Recently, MARD has promoted VIETGAP (Vietnam good aquaculture practices) in aquaculture.

The sub-sector enjoys high rate of growth in export in the last 15 years with average of 15% annually. Main export products are frozen fish, shrimp, and squid. Top importers are the U.S, Japan, Korea, Germany. Export of shrimp and catfish to developed countries has faced difficulties related to product quality standards.

### B.3 Agriculture policy framework

Vietnam Government had followed the centrally planned model since its reunification in 1975. Agriculture was prioritized as the most important sector in the economy. However, the country had not made significant achievement in agriculture until Renovation (Doi moi) in 1986 and especially market-oriented reform in 1989 and early 1990s.

Prior to Doi moi, the government promoted collectivization in agriculture. The efforts were not successful due to lack of farmers’ incentives. The “product contract system” was then initiated in 1981, under which farming groups and individuals cultivated on land contracted with cooperatives, paying back the amount of output specified in the contract. Some positive changes in agriculture production were realized, for example annual growth rate of agriculture was increased from 2% in the period 1975-1980 to 5.5% in the following five years. However, due to extremely high inflation, worker’s real income decreased drastically. In 1984, about 75% of population was under poverty line.

The Sixth Congress of the Vietnamese Communist Party in 1986 gave priority to economic mechanism and institutional reforms. The objective was to transform a centrally planned economy into an open, state-regulated market economy with multiple sectors. Private sector was encouraged to develop, firstly in agricultural sector. Farm households were recognized as the main unit in agricultural production, entitled to manage land (10-15 year-terms). Input and output markets were liberalized, and price subsidy system was eliminated. There are major changes in policy which are significant for the development of agriculture and especially private sector:

- **Land:** Promulgation of land Law in 1988, under which, farmers are entitled with agricultural land. Land Law was amended in 1993, specifying that land use rights can be transferred, exchanged, leased, inherited, and mortgaged.

- **Banking reform:** Banking system was decentralized in 1989. In 1993, lending to farm households by the commercial banking sector was initiated by the Vietnam Bank for Agriculture.

- **Market reform:** price was liberalized, private sector was encouraged to participate in food marketing, internal trade restriction barriers between regions was removed and foreign trade was eased.

Other laws were promulgated to encourage the participation of multiple sectors in the economy, such as foreign investment law (1987), Enterprise
and Company Law, State bank Law (1990). In 1991, support mechanism for SOEs was basically removed. During 1999-2003, important laws were amended and promulgated, such as foreign investment law, land law, and cooperative law. Private sector also has received more concerns through allowance to export, simplification of export and import license. Along with this, SOEs were renovated through rearrangement and equitization.

The integration of Vietnam to region and world is marked by the participation to ASEAN (1995), APEC (1998), and WTO (2006).

From 2000 up to now, the Government has implemented a number of national target programs. During period 2000-2006, there were six national target programs implemented, of which three were under MARD, namely National Program on Hunger Eradication and Poverty Reduction and employment creation (including National Program on Hunger Eradication and Poverty Reduction and employment creation, Program 135 (Boosting socio-economic development in 2,235 extremely difficult communes), and elimination and replacement of opium crop); five – million hectare of forest program; and program for Rural Water Supply and Sanitation. During period 2006-2010, ten national target programs were approved, of which MARD handled program on clean water and rural sanitation. Especially, under the Central Resolution 7 on “agriculture, rural, and peasants”, investment in agriculture and rural development in period 2009-2011reached 285,000 billions, double to that in period 2006-2008 (Bach Sen, 2012).

In period 2012-2015, sixteen national programs are implemented, of which are training program for labor and job creation; sustainable poverty reduction program; Clean water, Sanitation and Environment in Rural Areas, and new countryside building program.

**Part C: Current trends in public agriculture investment**

**C.1. Sources of public investment**

Before 1990, investment was sourced from State budget only, which contributed partly to serious budget deficit and extremely high deflation during late 1980s. Since 1990, the government has mobilized various sources of fund for investment, including private sector, and foreign direct investment. Generally, public investment comes from three main sources: State budget, Loans – including domestic loans (such as bond) and foreign loans, and equity of state owned enterprises. During period 1995-2010, public investment in the economy has risen about ten times, from 30,447 billion VND to 316,285 billion VND (GSO, 2012).

**Table . Structure of state investment by sources for whole economy (1995-2010)**

<table>
<thead>
<tr>
<th>Sources of investment</th>
<th>1995</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>State budget</td>
<td>44.6</td>
<td>43.6</td>
<td>54.4</td>
<td>44.8</td>
</tr>
<tr>
<td>Loans</td>
<td>19.9</td>
<td>31.1</td>
<td>22.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Equity of SOEs and other sources</td>
<td>35.5</td>
<td>25.3</td>
<td>23.3</td>
<td>18.6</td>
</tr>
</tbody>
</table>
Share of state budget in total public investment remained about 45% during the period 1995-2010, while share of loans had risen up from 20% to 37% (Table 7). Concerns have been raised for increasing public debt recently. According to Ministry of Finance (MOF, 2011a,b), public debt has increased from a share of 32.2% GDP to 54.6% GDP during the last 15 years. However, Anh and Thai (2011) shows that this figure should be about 70% if loans of central bank and government units (such as SOEs), are counted.

**State budget.** State budget for agriculture and rural development is allocated for Ministries (central level) and lower levels budget (i.e. provincial level, or localities). In agriculture, budget for basic construction managed by MARD accounted for 48% total budget in 1996, down to 27% in 2003 (MOF, 2004). State budget for agriculture and rural development is usually grant assistance for socio-economic infrastructure development, human resource development, and environment protection projects, which has almost no capacity to pay back or takes very long time to pay back (Anh and Thai, 2011). National target programs and sectoral programs are also funded by state budget. There were more than 30 target sectoral assistance programs to implement government decrees and resolutions. Some programs in agriculture and rural development, for example, are: aquaculture development program (400 billion VND), flood prevention program (360 billion VND), forest protection and reforestation program.

**Domestic loans.** There exists a kind of state development credit with subsidized interest and guarantee by government, which comes from either state owned credit, or official development assistance (ODA). This kind of credit is usually for investment in priority areas set by government. Other important source of domestic loans comes from bond, investing in selected areas such as education, energy, agriculture and rural development.

**Foreign loans.** Foreign loans come from outside through ODA to invest in projects committed to donors. Priority of using ODA depends on demand for development investment capital as well as development plan for sectors and regions. There are five top priorities using ODA in period 2006-2010 (Decree 290/2006/QD-TTg), which are: agriculture and rural development; economic infrastructure building and social infrastructure building; environment and natural resource protection; enhancement of institutional capacity; and human resource development and R&D. From 1993-2008, the government and donors signed international commitment on ODA with total amount of 35.217 billion USD, of which ODA grant accounts for 20%. During the period, total ODA disbursement reached 22.065 million USD. Agriculture and rural development is prioritized with total investment from ODA amounted to 5.5 billion USD in the period 1993-2008, accounting for about 16% in total ODA (Fig. 3). Some important projects are:
poverty reduction project in Northern mountainous area, community based rural infrastructure development, rural water supply, and rural transportation.

Figure . Structure of ODA investment in Vietnam, period 1998-2003
Sources (MPI, 2009)

Investment of SOEs. Investment from SOEs comes from their own capital, which is largely built from state budget. Number of SOEs has decreased over time through process of renovation and equitization. In 2009, total number of SOEs is counted at 3,328 - down from 5,759 in 2000, accounting for 1.6% total number of enterprises (GSO, 2011). Capital of SOEs, however, accounts for 48% of total capital of enterprises in Vietnam. However, Law of SOEs was put in ineffectiveness since 2010, all SOEs are transformed to single-member limited companies and other types with state equity greater than 50%. (hereafter still referred as state enterprises). MARD has established a Board for renovating Agricultural SOEs to speed up the transformation.

C.2 Sectoral allocations of investment

Areas of investment. Total investment in the country grew at 18.6% annually in the last decade. Investment in agriculture accelerated from 74,000 billion VND in period 1996-2000 to 199,000 billion VND in 2006-2010, however at lowest rate (9.3%) as compared to others (Table 8).

Table . Vietnam’s investment by sectors, 1996-2010

<table>
<thead>
<tr>
<th>Sector</th>
<th>Investment amount ('000 billion VND) Sub - period</th>
<th>Share in total (%) Sub - period</th>
<th>Annual growth rate (%)</th>
</tr>
</thead>
</table>
C.3. Public investment in agriculture

Total public investment reached 316,300 billion VND in 2010, more than triple of that in year 2000, meanwhile public investment for agriculture grew at rate of about 17% annually (Table 9). About 40% of public investment was allocated to infrastructure building, such as electricity, water, transportation, and telecommunication. In 2000, public investment in agriculture accounted for 12.2% of total public investment; this figure dropped to 5.9% in 2010 (Table 9). However, this interpretation might not totally correct, since a large part of public investment comes from government bond is not counted in state budget (Anh and Thai, 2011). According to MARD(2012), total public investment in agriculture and rural development was put at 172,810 billion VND in period 2006-2010, accounting for 20.9% total public investment where state budget and government bond are counted.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2000</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total public investment (’000 billions VND)</td>
<td>89.4</td>
<td>125.1</td>
<td>161.6</td>
<td>198.0</td>
<td>316.3</td>
</tr>
<tr>
<td>Agriculture public investment (’000 billions VND)</td>
<td>11.0</td>
<td>11.0</td>
<td>11.6</td>
<td>13.4</td>
<td>18.5</td>
</tr>
<tr>
<td>As % of total public investment</td>
<td>12.2</td>
<td>8.8</td>
<td>7.2</td>
<td>6.8</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Sources: GSO data

Industry and services have been given more priority with increasing investment both in value and share in total investment, while important sectors of the economy (agriculture, education, health care, R&D) receive less as compared to industry and services. Development of the two sectors on the sacrifice of agriculture could be reasoned if it is more efficient in terms of economic, social, and environment aspects. However, a number of big SOEs in Vietnam now have serious financial problems, such as Vinashin went bankrupt with loss of more than 80,000 billion VND– equivalent to about 4 billion USD. Agricultural land (especially rice land) taken for industrial zones is a controversial issue in meetings of Parliament, especially farmer’s resistance in some places. Environment pollution from industrial zone is an alarming problem in Vietnam, not only concerned to human health, but also negative impacts to agriculture production. According to General Department of
Environment, about 70% of liquid waste from industrial zones is disposed directly without treatment.

**C.3.1. Public investment in agriculture and rural development by sub-sector**

According to MARD (2012), total public investment in agriculture and rural development period 2006-2010 amounted to 388,673 billion VND, of which 45% was allocated for agriculture, forestry and fishery development. The rest went to rural development, focusing on development of socio-economic infrastructure, hunger elimination and poverty reduction in rural areas.

Public investment is agriculture and rural development is managed by line agencies (at central level, i.e. ministries) and local levels. There has been a strong decentralization in managing investment in the last decade. In 1998, budget expenditure at central level accounted for 60% of total state budget. The figure went down to 21% in 2002 (MARD, 2004). During period 2006-2020, MARD managed only about 10% of total public investment in agriculture and rural development (MARD, 2012), down from 48% in 1996 (MARD, 2004). In this study, only data on public expenditure managed by MARD is gathered.

**C.3.2. Sources of public investment (managed by MARD)**

Public investment is made from two main sources, state budget (55.4%) and government bond (44.6%) during period 2006-2010 (Table 10). This shows that government has made efforts in mobilizing resources for the sector. However, heavy dependence on loans (foreign and bond) requires either sector’s efficiency or economic gains somewhere else to pay back.

**Table . Structure of public investment managed by MARD, 2006-2010 (%)**

<table>
<thead>
<tr>
<th>Sources</th>
<th>2006</th>
<th>2008</th>
<th>2010</th>
<th>Total (2006-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State budget</td>
<td>51.2</td>
<td>57.7</td>
<td>53.4</td>
<td>55.4</td>
</tr>
<tr>
<td>Domestic</td>
<td>27.9</td>
<td>28.1</td>
<td>22.1</td>
<td>25.0</td>
</tr>
<tr>
<td>Foreign</td>
<td>23.3</td>
<td>29.7</td>
<td>31.2</td>
<td>30.4</td>
</tr>
<tr>
<td>Government bond</td>
<td>49.1</td>
<td>42.3</td>
<td>46.6</td>
<td>44.6</td>
</tr>
</tbody>
</table>

Sources: MARD, 2012

**C.3.3. Sub-sector allocation**

Public investment in agriculture through MARD has increased steadily over time, where the largest part of resource is allocated to irrigation (70%-80% of total), then agriculture (including forestry and fishery)(Fig. 4). Other items includes rural infrastructure (including rural transportation), water supply, education, warehouse, national target program, and others.

**Figure . Trend of public investment in sub-sectors in agriculture, as managed by MARD, period1996-2010**

Sources: MARD (2004) and MARD (2012)
Agriculture Infrastructure

Irrigation. Irrigation receives special concerns which constantly takes more than three-fourths of total public investment in agriculture and rural development during period 1996-2010. In the past years, the government has made efforts for building irrigation system for multi-purposes. Up to 2010, a total of 100 small and medium irrigation works had been constructed, including 1,967 reservoirs with capacity of more than 200,000m$^3$, 10,000 pumping stations, 1,000 km large channels, 5,000 irrigate and drainage sewers, 23,000 km of dikes. During period 2003-2010, five main irrigation programs are conducted: safety for reservoirs program, irrigation projects for economic structure changes (such as for aquaculture, salt production...), irrigation channel upgrading program, national target program on clean water and rural sanitation, and upgrading dike systems (MARD, 2009a).

<table>
<thead>
<tr>
<th>Table . Results from public investment in irrigation, Vietnam , 2006-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
</tr>
<tr>
<td>Annual cropping area is irrigated (as % of total cropping area)</td>
</tr>
<tr>
<td>Annual cropping area is drained (as % of total cropping area)</td>
</tr>
<tr>
<td>Incremental irrigated area (’000ha)</td>
</tr>
<tr>
<td>Incremental drained area (’000ha)</td>
</tr>
<tr>
<td>Incremental area protected from saline water intrusion (’000ha)</td>
</tr>
<tr>
<td>Upgrading river dikes (km)</td>
</tr>
<tr>
<td>Upgrading sea dikes (km)</td>
</tr>
</tbody>
</table>

Sources: MARD (2012)

Infrastructure for fishery development. Investment in fishery infrastructure during period 2006-2010 focuses on three important programs: Storm shelter anchorage and moorage for vessels, Fish ports investment; and Fishery seed production and infrastructure investment.

Infrastructure for cultivation and livestock development. Important areas of investment are: enhancing capacity in research and breeding; enhancing capacity in quality testing of seed, breeding, and fertilizer; enhancing capacity in crop protection and crop quarantine to support for disease prevention and import - export of agricultural products; and enhancing capability of veterinary system.

Infrastructure for forestry development. During period 2006-2010, four projects in forestry seedlings production were implemented. Survey, evaluation, and inspection of forestry development program (Phase 4) are implemented nationwide. MODIS Ground Receiving Station was set up for early detection of hotspots in forest. National parks and natural preservation areas also received investment from government for upgrading infrastructure in special-use forest.
**Agriculture production.** Investment in this area accounted around 15% of total public investment in agriculture sector. The investment covers mainly basic areas such as seed, seedlings, breeding, plant protection chemicals, veterinary system, veterinary medicines, disease prevention and control, forestry, fishery, afforestation, and resettlement. Seed and seedlings for crop production, animal husbandry, livestock and forestry account for a considerable part of total investment. For example, about 31% of expenditure during the period 1999-2003 was allocated for the seed and seedling project (MARD, 2004). MARD has also approved another project on seed and seedlings, livestock and fishery production period 2010-2020, with total investment of 69,900 billion VND (MARD, 2009b). Forestry and other related services took about 10% in agriculture investment (MARD, 2004).

**R&D.** Unfortunately, statistics show that there is not much change in R&D investment in the last 15 years. While total public agriculture investment increased by about ten times, R&D investment is only more than triple, from 68 billion VND to 248 billion VND. R&D investment is not only for annual activities of research agencies, but incorporated in projects and programs implemented by MARD. During period 1996-2003, R&D investment for food crops took largest share in total R&D investment (26%), followed by husbandry and veterinary (13%), irrigation (12.5%), and forestry (11.5%) (MARD, 2004). R&D investment accounts for about 6% in total public agriculture investment in 1996, reached 12% in 2003 and down to only 2% in 2010 (Fig. 5).

**Figure**. **Investment of public R&D in agriculture in Vietnam, selected years**

Fan *et al.* (2004), found that government spending on irrigation, roads and agricultural research has all contributed to both agriculture growth and poverty reduction in Vietnam. During period 1993-2002, every 1 VND spent on agriculture research generated 12.22 VND of agricultural production value. The results show that return to irrigation investment was lowest among items (agriculture research, roads, and education), estimated at 0.42 VND for every 1 VND spent. Agricultural research spending was found to have the largest return in poverty reduction. For every billion VND spent on education, 339 poor people would be lifted above the poverty line. Irrigation has the smallest impact on poverty.

In another study, Barker *et al.* (2002) estimated determinants of agriculture growth for the same period with Fan *et al.* (2004) and found that public investment in irrigation was the most important sources of agriculture growth (accounting for 28% of the growth), followed by agriculture research (contributing of 27% in total growth).
C.4. Government initiatives to promote investments in agriculture

Government has made a lot of efforts to promote investment in agriculture. Aside from allocation of resources for investment, the government has introduced a course of policy to create an attractive environment for both domestic and foreign investors in agriculture.

C.4.1. General legal framework

The Investment Law defines selected sectors and geographic areas that are entitled to investment incentives (especially agriculture in remote area). Other incentives are governed by specific tax, land and other regulations. Incentives are the same for both foreign invested and domestic enterprises.

**Important laws** related to investment and operation of enterprises are introduced, such as:

- **Law on Investment (2005)** regulates investment procedures, investment incentives, the rights and obligations of investors, state management of investment and abroad investment from Viet Nam. The law specifies domains entitled to investment preferences, such as production of new materials, farming and processing of agricultural, forest or aquatic products. The Law also provides terms for direct foreign investment.

- **Law on Enterprises (2005)** defines type of enterprise and establishment procedures, and regulates all forms of private enterprise, their organization and operation in Viet Nam.

- **Law on Enterprise Income Tax (2003)** stipulates that family households, individuals, cooperation groups and cooperatives engaged in agricultural production with incomes from cultivation, husbandry and aquaculture products are not liable to Enterprise Income Tax, except those producing at large-scale commodity production with high incomes as defined by the government.

- **Law on Tax Management (2006)** provides equality among economic entities as well as among domestic and foreign investors.


C.4.2. Policies related to land use

- **Legal underpinnings for land use by nationals and foreigners are set by Land Law in 2003.**

- **Subsidized land rental for investment in agriculture in case of calamities or risk damage. In case damage is greater than 40%, investor does not have to pay rental (Decree 142/2008/ND-CP on land and water surface rental). Zero-rental for land in 3-15 years for investment in the priority list set by government.**
- Reduction and exemption of agricultural land using tax for investors from effective date to year 2020 (Decree 20/2011/ND-CP, which guides implementation of Resolution 55/2010/QH12).

C.4.3. Policy related to credit

- Investor can avail state credit amounted up to 70% of the investment project (fixed) capital, term of loans could be maximum of 15 years for special project (for example rubber plantation), fixed interest rate during term of loans (Decree 151/2006 on state investment credit and state export credit)

- Subsidized credit for investors in agriculture: resolution 12/CP-CP dated April 6, 2009 , specified by decision 497/2009/QĐ-TTg, stipulates that farm households, individuals, cooperatives and enterprises enjoy subsidized credit when purchasing assets for agriculture production and house construction in rural areas.

- Decree 131/TTg –CP in 2009 on subsidized interest rate for individuals and enterprises at 4% per annum in eight months, under certain conditions. The poor and selected stakeholders can borrow at rate of 4% per annum from Bank of Social Policy, as stated in the Decision 579/QĐ-TTg in 2009.

- Commercial farms can borrow up to 500 million VND without collateral, as stipulated by Resolution 41/2010/NĐ-CP on credit for agriculture and rural development.

C.4.4. Policy related to tax

- Individuals/groups investing in agriculture, fishery, and salt production enjoy lower income tax and lower tariff (Decree 108/2006/ND-CP). Selected investment areas in agriculture are tax exempted, for example direct services for agriculture production: irrigation, plough, harvesting and others, income tax rate of 10% -20% is applied for selected investment areas as set by government (Decree 124/2008/ND-CP).

- Import tax exemption for goods served as inputs for agriculture and fishery production projects (such as seeds, animal breeds). Other goods imported for agriculture production are subjected to imported tax preference (Decree 87/2010/ND-CP).

- Value Added Tax exemption for raw or semi-processed agricultural and fishery products of selected producers, seeds and animal breeding, agricultural services (land preparation and harvesting), and salt production. VAT tax rate of 5% is applied for many agricultural inputs, as listed in Law on Value added tax, 2008.

Recently, Decree 61/2010/ND-CP lists 2 main areas that agriculture investors enjoy preferences and supports from government. Investors enjoys lower rental or zero rental on renting state’s land, supports on renting land of individuals/private organizations (up to 50% in the first 5 years). Government provides other supports for investors (selected) in:
- Labor training costs (up to 100% for super small enterprises investing in special areas)
- Market development: supports can be up to 70% of total cost of advertisement
- Consultant services: supports up to 50% cost of consultant services in areas of investment, law consultant, R&D, and others.
- R&D: supports up to 50% cost of research project which aims to invent new technology.
- Transportation: support could be up to 50% actual transportation, under certain conditions

Specifically, there are initiatives to attract FDI in agriculture. In 1988, the government promulgated foreign investment Law, then amended in some following years, creating a strong wave for capital inflows to the country. Other incentives are (FAO, 2012): carrying-forward of losses permitted for up to 5 years; No profit remittance tax; Additional incentives for projects involving technology transfer in difficult socio-economic areas; and other benefits in accordance with law.

Government has also promulgated a number of Law and documents under Law to form a legal framework for investors. Other relevant laws concerning to investors in agriculture are: Law on Water Resources (1998), Fisheries Law (2003), Law on Environmental Protection (2005), Law on Food Safety (2010). Government encourages private sector through public investment carried out by various projects and programs, which are managed by MARD\(^2\) and localities.

C.4.5. Other incentives for investment in agriculture

Increasing effective rate of protection (ERP) for agro-processing. According to CIEM (2010), during period 2005-2009, ERPs for agro-processing industries, such as cocoa, cakes products from flour, processed preserved fisheries, vegetables and fruits, processed coffee, tea, had increased. In 2009, products with highest ERPs (more than 50 percent) are those of food processing industry (tobacco and cigarette, sweetie, alcohol, non-alcoholic beverages, processed fruits and vegetables, coffee and other foodstuff).

Public investment program. From 1996, the Ministry of Planning and Investment (MPI) has designed and implemented Public Investment Program (PIP) in accordance with 5-year plans (1996-2000 and the next two). The first PIP was designed as pilot with supports from international experts, the second was designed by MPI and relevant line agencies, and local agencies. ADB helped MPI with the 3\(^{rd}\) one. Projects in PIP have gradually been required to satisfy international standards and principles, subjected to careful screening (Tuan and Thai, 2011).

Trade promotion program. Government has made initiatives to help enterprises in market promotion, under the national program on trade promotion (NPTP)
implemented by the Department of Trade Promotion, Ministry of Industry and Trade. Started in 2002, NPTP aims to boost export performance. Specifically, NPTP focuses on enhancing trade promotion activities, expanding export and domestic markets, developing trading activities in remote and mountainous areas, and enhancing competitiveness of Vietnam’s enterprises.

MARD established an website on trade promotion in agriculture (http://xttm.agroviet.gov.vn) which provides market information, reports on production and market (both domestic and world markets), and news related to 14 key agricultural products and inputs, namely: rice, coffee, tea, rubber, cashew nuts, pepper, vegetables and fruits, meat, sugar, wood, fishery, salt, fertilizer and animal feed.

**Public Private Partnership Initiatives in Agriculture.**

MARD and about 15 international groups (ADM, Bunge, Cargill Inc., Cisco Vietnam, DuPont Vietnam, METRO Cash & Carry Vietnam, Nestlé, PepsiCo Vietnam, Monsanto Vietnam, Swiss Re, Syngenta Asia Pacific, Unilever Vietnam, Yara International....) have developed partnerships in 5 working groups including tea, coffee, vegetables, fishery and common commodity group.

**PPP coffee group:** private sector includes Nestle, Yara, Syngenta, Bayer, BASF, Cisco, EDE consulting, Dakman, Sara Lee, Vinacafe, and others. Coffee group operates in Lam Dong and Dak LaK Province.

**PPP Tea group:** Objectives of this group is to enhance tea export and improve quality of Vietnamese tea. Tea group operates in Phu Tho province with cooperation of Unilever, who collects approximately 30,000 tons of tea leaves per year (Cong, 2012).

**PPP vegetable and fruits group:** Application of GAP in production of vegetables and fruits. Initially the model focuses on potato growing in Lam Dong province (South), then Hai Duong, Bac Giang, Vinh Phuc, and Ha Noi (North). PepsiCo and Syngenta, Yara are private companies participating in the partnership with MARD.

**PPP Fishery group:** Metro Cash & Carry Vietnam, Cargill, and Fresh studio are those involved in partnership with MARD and line agencies. Metro established a center for fishery products collection, processing and packaging in Can Tho in September 2011.

**PPP Common Commodity group:** The group targets to strengthen the sustainable production of maize and soya bean. Monsanto with IPSARD conducted a study on GMO products in Vietnam.

PPP agriculture has also established a group specializing in finance and microfinance, called Finance-credit group. In-country agencies include MARD, State Bank and MOF. The group invited other organizations such as WB, ADB, IFAD, bilateral cooperation such as JICA, Dutch, FAO to mobilize financial sources.

**Others initiatives made by MARD.**

- MARD has designed a plan to develop agricultural enterprises period 2011-2015 (MARD, 2012b), which sets target to have 10% newly established
enterprises, creating 10,000 jobs, and having 30% of total SMEs benefited from human training program.

- MARD has also organized annual dialogue meeting among agricultural enterprises, line agencies, government and scientists, in order to help investors to overcome difficulties.
- MARD provides information on government policy related to agricultural enterprises, frequently asked questions and proposals from enterprises and responses from MARD (in website of MARD) and Vietnam Agriculture Newspaper.
- MARD has conducted training courses for human resource of agricultural SMEs in some provinces, such as Bac Giang, Ha Noi, Hai Duong, and Thai Binh.
- MARD and The Prime Minister have approved a number of regional planning for agriculture production. For example, Decision 150/2005/QĐ-TTg approves planning of shifting the production structure on agriculture, forestry and aquaculture to 2010 and vision by 2020, Decision No.102/2008/QĐ-BNN on development planning of producing and consuming catfish of the Mekong Delta to 2010 and the orientation by 2020, Decision No.10/2006/QĐ-TTg approves overall development planning of aquaculture to 2010 and the orientation by 2020, Decision No.52/2007/QĐ-BNN approves the development planning of vegetable, fruit, flower, and ornamental plants to 2010 and vision by 2020.

Part D: Private investment in agriculture

D.1. Current trend of investment in agriculture

Various incentives initiated by government have augmented private investment in agriculture. In 2000, total investment made by private sector accounted for less than 50% of total country investment in agriculture, this figure rose up to about 64% in 2010 (Fig. 6).

Private enterprises. Total number of enterprises was counted at 448,393 in 2012 (GSO, 2012), which is about ten times of that in 2000 (Table 12). While non-state enterprises3 grew sharply during period 2000-2008 in terms of both number of enterprises and capital stock, number of SOEs has been shrunk considerably with a reduction of nearly 50% (Table 12).

Table. Number of enterprises and capital stock amount by economic activity and ownership in Vietnam, selected years.

<table>
<thead>
<tr>
<th></th>
<th>Year 2000</th>
<th>Year 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-private enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOEs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-SOEs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 Including Collective/Private enterprises, Collective name enterprises, Private Limited Co., Joint stock Co. having capital of State, Joint stock Co. without capital of State enterprises), and sector of Foreign investment (100% foreign capital enterprises and Joint venture enterprises)
<table>
<thead>
<tr>
<th>Enterprises</th>
<th>Capital stock</th>
<th>Enterprises</th>
<th>Capital stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Structure</td>
<td>Amount (bil.)</td>
<td>Structure</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
<td>82</td>
</tr>
<tr>
<td>a. By economic activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>8</td>
<td>8.0</td>
<td>27,047</td>
</tr>
<tr>
<td>Non-agriculture</td>
<td>38.9</td>
<td>1,073,1</td>
<td>92</td>
</tr>
<tr>
<td>b. By ownerships</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOEs</td>
<td>9</td>
<td>13.6</td>
<td>746,52</td>
</tr>
<tr>
<td>Non-state Sector of Foreign investment</td>
<td>35.0</td>
<td>113,49</td>
<td>04</td>
</tr>
<tr>
<td>Foreign investment</td>
<td>1.52</td>
<td>240,15</td>
<td>5</td>
</tr>
</tbody>
</table>

Sources: computed from GSO data (2010)

Strong re-distribution of enterprises has occurred, with share of SOEs in total enterprise population reduced considerably from 13.6% to 1.6% during period 2000-2008 (Table 12). The same trend is observed for foreign investment sector. However, there is an asymmetric distribution of capital stock among types of enterprises. For example, SOEs made up only 1.6% in population, but took 40% total capital stock of all enterprises. Conversely, though number of agriculture enterprises grew more than double during period 2000-2008 and accounted for 4% in the total population, but its share in total capital stock of the population drops from 2.5% to 1.2%, showing that most of them operates at small and medium scales (SMEs).

According to MARD(2009a), private enterprises have grown rapidly at SME scales, largely in agro-processing for rice, cashew nuts, tea, fruits and salt. In 2006, a total of 1,153 private enterprises investing in agriculture (accounting for 54% number of agriculture enterprises), mostly in aquaculture and fishery catching. Total capital stock of the private enterprises was estimated at 5,320 billion VND, accounting for 16.6% total capital stock of agriculture enterprises.

There were about 10.4 millions of farm households and 113,699 commercial farms in 2006 (GSO, 2007), with total capital estimated at about 80,000 billion VND, approximately with total capital stock of agriculture enterprises.
D.2 Key national, regional and international firms/banks investing in Agriculture

Vietnam Bank for Agriculture and Rural Development (VBARD) is the top commercial bank supplying credit for agriculture sector with wide network developed since 1988. Total outstanding loan was estimated at around 450,000 billion VND by the end of 2011. VBARD also cooperates with MARD and other line agencies in implementing various programs in agriculture and rural development, such as national targeted programs, rapid and sustainable poverty reduction program in 61 poor districts. According to Agribank (2012), main clients of VBARD are farmers (about 10 million) and agricultural enterprises (about 30,000 enterprises). VBARD is ranked 10th in top 500 largest enterprises in Vietnam, by VNR500 Club.

Vietnam Southern food corporation (Vinafood II) is the biggest rice exporting company in Vietnam, rank 21th by VNR 500. The company was previously SOE, transformed to a single-member limited company in 2010. Main activities are production and agro-processing, mainly rice.

C.P (Charoen Pokphand) group is a transitional group from Thailand, started in Vietnam in 1993. Main activities are production and trade of seed, animal feed, piglets, chicks, and fishery seedlings, contract farming in pig and chicken, and food processing. C.P group is ranked 28th in VNR 500 in 2011. Proconco joint stock company (Vietnam and France), Cargill company limited, Greenfeed Vietnam, Japfa Comfeed Long An are also big producers of animal feeds in Vietnam.

Vietnam dairy Products Joint – Stock Company is previously a SOE. Main products are milk and milk products, such as condensed milk, drinking and spoon yoghurt, ice cream, and cheese. The company is rank 43rd in top VNR-500 and top biggest private company in Vietnam.

In field of production and trading agricultural inputs (plant protection chemicals and fertilizer), Unilever LD Vietnam (100% foreign capital) is top ranked, followed by An Giang Plant protection Joint stock company (top private enterprises in chemicals for agriculture production in Vietnam), Petrovietnam Fertilizer and Chemicals Company (SOE previously), Binh Dien fertilizer company (SOE previously).

Top investors in aquaculture, processing and trading aquatic products are private enterprises. Top ranking by VNR 500 is Minh Phu Seafood Corporation (established in 1992), Hung Vuong Corporation, Vinh Hoan Corporation, Minh Quy Seafood Company Limited, and DABACO group.

D.3 Foreign direct investments (FDI)

According to GSO statistics, total number of FDI projects reached 12.575 during period 1990-2009, of which 738 projects in agriculture (accounted for about 6% of total projects). There is unfortunately a downwarding trend in FDI in agriculture.

4 Vnr500 - the vietnam top 500 largest enterprises by revenue rankings under the model of fortune 500 list is annually announced by vietnamnet newspaper based on the independent research results in accordance with international standards by vietnam report joint stock company, under the consultancy of vietnamese and international experts particularly including professor john quelch, associate dean of harvard business school. http://vnr500.com.vn/home-us/
During period 1991-1995, FDI in agriculture peaked about 1.4 billion USD, however dropped to 993 million USD and 897 million USD in the followed sub-periods (Table 13). During the period 2007-2011, agriculture sector attracted 471 million USD from FDI, accounting for only 0.5% total FDI in Vietnam. In the first six month 2012, there were only 4 new projects in agriculture among 452 FDI projects with total registered capital of 8.9 million USD, accounting for less than 0.2% of total FDI capital registered (FIA, 2012a).

Table 1. FDI in agriculture sector

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (mil. USD)</td>
<td>1,413</td>
<td>17,018</td>
<td>21,263</td>
<td>10,211</td>
<td>102,010</td>
</tr>
<tr>
<td>Agriculture total (Mil. USD)</td>
<td>350</td>
<td>1,409</td>
<td>993</td>
<td>897</td>
<td>471</td>
</tr>
<tr>
<td>As percentage of total FDI</td>
<td>24.7</td>
<td>8.3</td>
<td>4.7</td>
<td>8.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Sources: computed from GSO data (2010) and Ministry of Planning & Investment data

FDI projects are concentrated in selected sub-sectors, namely forestry plantation, wood processing, livestock, animal feed processing, and fishery, of which the first two accounted for about 78% FDI in agriculture (Quang and Ngoc, 2011). According to Foreign Investment Agency (FIA, 2012b), total foreign investment in agriculture registered about 4.4 billion USD during period 1988-2007, of which agro-processing projects accounted for about 54% total capital registered, followed by forest plantation and forestry product processing (25% capital), and livestock and animal feed (13% capital). Number of projects in crop production accounted for less than 10% in total agriculture FDI projects during the period.

Most of FDI projects are located in provinces with advantages in natural, climate, and business environment, such as in the South East region (Ho Chi Minh city, Binh Duong, Lam Dong, and Dong Nai provinces) and Central Highlands. FDI in Vietnam comes from over 50 countries, of which Taiwan, Japan, China, and Thailand are top investors with capital registered accounted for about 60% total FDI in agriculture (Quang and Ngoc, 2011).

D.4. Factors affecting the business climate for private and FDI in the agriculture sector

Aside from a number of incentives for investors in agriculture, the enabling environment for the investors is perceived not favourable enough. Aside from risky nature of agricultural production, constraints and obstacles to agro-enterprises are largely resulted from implementation of policy in reality, poor infrastructure, macro policy, and economic recession recently.

1. Difficulty in acquiring land for production

It takes long time and complicated procedures for investors to acquire land for agriculture production/business. According to 8/12 respondents, required documents and procedures for acquiring land are complicated and very time-consuming. Two
interviewees reported no problem with land, one is Thanh An company (very small agro-processing company) and Mushroom center, which operate in small scale and do not require much of land.

Hong Quang seed company which has received considerable supports from local government to sign contract with farmers (through agriculture cooperatives), also found difficult in acquiring more land for seed production and set up a cool warehouse.

Land resource also limits the development of agro-processing companies in establishing a production/processing areas with appropriate disposal treatment facilities.

2. Poor and inadequate infrastructure

Poor infrastructure, especially road in remote area has contributed to higher production and marketing cost (transportation cost, higher rate of deteriorated products). Especially during rainy season, many secondary roads are inaccessible, therefore harvested agricultural products are stuck at producing area while enterprises experience serious shortage of materials. In some cases, investors have to upgrade irrigation system or secondary roads in rural areas for production and marketing. These initiatives do not work if farmers then do not follow strictly contract clauses. This is case of Hoa Binh Agro-processing company, which allocated about 100 million VND for upgrading infrastructure in 2006 (such as irrigation, secondary roads) and supplying inputs for farmers in contracts. However, farmers broke agreements and did not return maize output back to the company. Thanh Son Company, on its efforts to procure maize from high mountainous and inaccessible areas, has to invest in roads and a system of pulley and cables across valleys and hills. Narrow roads in rural areas add more on transportation cost, for example case of Thanh An company.

3. Limited access to credit

Almost all of respondents revealed that they face many difficulties in availing credit from banks. Aside from procedures, loan size, interest and payback period are not appropriate for agriculture production, which is riskier, lower profit rate, and long production cycle. In the latest survey of GSO (2012) covering 9,331 enterprises, there were 5,394 enterprises availing credit from different sources, of which nearly one-third had to pay interest at rate of higher than 19% annually. Majority of respondents agreed that acceptable interest rate should be lower than 14%.

Although there are a number of advocated policies designed by government for investors in agriculture, many of them are left ineffective because either lacking of detail guiding documents or irrelevant for many enterprises. For example, Decision 63/2010/QĐ-TTG to support investors in reducing post-harvest loss in agriculture production, according to which investors can borrow from banks with subsidized
credit. However, equipments purchased (such as dryer, combine harvester) must be produced from at least 60% domestic materials and by (defined) manufacturers. Generally, these machines are practically expensive and not suitable for small and medium scale enterprises (case of Hoa Binh agro-processing company). Quality of the assets is another issue concerned by farmers and investors.

Generally, farmers are given priority to borrow from bank if they could submit contracts signed with enterprises (agro-processing). However, due to different reasons, very few processors sign contracts with farmers. For example, farmer’s break down of commitment, or high risk in agriculture production. For larger scale farmers (or commercial farms), collateral is a major constraint, even initiatives have been made by government to ease the access to credit for farmers\textsuperscript{5}.

High interest rate and difficult to avail credit from banks are two among the most serious constraints for their survival and development, as reported by 27% and 17.4% of total enterprise leaders (GSO, 2012).

4. Unstable sources of materials

Due to demand for high volume of fresh agricultural products, processors have to source materials from growers (largely farmers). However, low and inconsistent quality and instability of material supply are persistent constraints to agro-processing enterprises. Six among surveyed enterprises reported that insufficient supply of materials was main problem. Probably Van Dac Phuc is typical example, with supply of materials meets only 10-15% capacity recently.

Several causes are:

- Small scale and fragmented production at farm level, for example, PACIFIC Hoa Binh currently contracts with about 600 farmers/farmer groups growing cucumber in 350 ha, spreading in several provinces. Land for material production is not concentrated, so that processors have to seek for other sources in distant places.
- Contract growers break agreements when market price is higher than contracted price, or do not follow strictly technical requirements in production.

Even a number of planning proposals were approved (mentioned earlier), the progress of planning regions for specific agricultural products has been slow. Unbalanced development between material supply capacity and processing capacity is another problem, leading to conflicts in sourcing materials among

\textsuperscript{5} For example, the Decision No. 331/CP (4% interest rate/year), Decision No. 497/2009/QĐ-TTg on subsidized credit for farmers to buy equipment for agriculture production, Desisions no. 443/QĐ-TTg, 579/QĐ-TTg and 622/QĐ – TTg on subsidized credit for agriculture production, especially the Decree 41/2010/ND-CP states that commercial farms could avail credit up to 500 million VND without collateral.
processors (for example in fishery). According to Vietnam Association of Seafood Exporters and Processors (VASEP), the situation of too many catfish processors in the Mekong rivers delta has contributed seriously to under capacity of operation. VASEP (2012) also alarms the situation of material shortage for catfish processors in the coming time.

5. Labor

Majority of rural labors are unskilful and do not strictly comply to rules in enterprises. This causes additional cost for training and contributes to higher cost in operation for investors. In case of agriculture production, not all farmers contracting with companies strictly applied farming practices required by companies, resulting in the dissatisfaction of product quality and quantity and therefore conflicts with companies. This happened to all agricultural products, except case of maize for animal feeds (Thanh Son company, Hoa Binh agro-processing joint stock company). Some enterprises also face difficulties in recruiting labors, due to competition among factories and with other job opportunities, especially high inflation recently.

6. Unfavorable macroeconomic environment

High inflation has resulted in high cost of production (23% in 2008 and 18% in 2011, GSO data) while export price is kept quite constant (case of Pacific Hoa Binh). In addition, exchange rate policy is crawling bands with relatively narrow band (mostly from +/- 0.75% to +/- 3% during 2008-2011) (Vietnam Parliament Committee and UNDP, 2012). This, coupled with high inflation during period 2008-2011, has made agro-processing less profitable and discouraged investors, especially export-oriented enterprises\(^6\). High inflation is ranked the most serious constraint to enterprise development, as reported by 1,820 entrepreneurs (GSO, 2012). The increase of fuel price recently has contributed to rising transportation cost for enterprises, especially for those operate in remote areas. This, coupled with unstable electricity, are considered one of the most serious constraint to enterprises by about 17% of respondents (GSO, 2012).

Despite of rising ERPs in agro-processing industry, several unprocessed agricultural products (such as other perennial crops, poultry, pigs, cattle and buffalos, rubber latex) have negative ERPs, meaning production of these commodities is not protected. CIEM (2010) concludes that Vietnam tends to protect industries with low competitiveness (including food processing) while does not provide protection to unprocessed agricultural products during the implementation of WTO commitments.

\(^6\) Real effective exchage rate (REER) of Vietnam had increased by 20% in 2010 as compared to 2003 (Hang, 2011)
Economic recession recently has worsened the situation. GSO (2012) reports that in year 2011, about 8.4% of total number of enterprises stopped working and waiting for dissolution.

7. Legal framework

*Lack of efficient court enforcement of contract*: In the absence of efficient court enforcement of contract, breaking of contracts between farmers and processors, as mentioned earlier, is not always solved thoroughly. The case happens usually during high market price of raw products, some farmers behaved opportunistically, selling the raw products outside. In this case, investors have to pay additional cost for private enforcement mechanism, such as set up check-up points in producing areas to prevent farmers to sell products to traders, or prevent traders to move in (for example, cases of Pacific Hoa Binh, Hoa Binh sugar joint stock company, Huong Nam mushroom center, Hong Quang seed company). Van Dac Phuc company had invested and signed contracts with several agricultural cooperatives in the past but failed due to contract breaking. Earlier initiatives on PPP were partly incorporated in the Decision 80/2002/QĐ-TTG on encouraging contract farming between enterprises and farmers. Thereafter this was called “linkages among 4 stakeholders: farmers, enterprises, scientist, and government”. However, the Document as well as the linkages defined above are shown not to be effective in reality for a number of reason, of which is unclear legal framework for the coordination.

*Complicated administrative management*. Despite of efforts made in simplifying administrative procedures by government, enterprises (especially those importing materials) find it still very time consuming and costly. Initially, agro processing company/FDI is encouraged to source materials produced domestically. However in case some of materials are either not available or not acceptable by customers (i.e. requirement of origin), import is needed. In case of Van Dac Phuc, it takes averagely 1.5-2 months to get materials since the imported materials arrived.

*Policy transparency*. Agro-processing enterprises are confused there are many government agencies involved in checking food quality (Ministry of Health, MARD). While medium and large enterprises found it not difficult to get access to new documents/guides/policy, small (micro) enterprises especially in remote areas reported that they could not update with new government documents, because of poor information system. Besides, terms used in some legal documents are usually difficult for them to understand (i.e. could be understood in different ways). Some documents are not in agreement with each other, and released too frequently, creating confusion for users.

D.5 Conclusions and policy recommendations

Agriculture and rural sector continues to play key role in socio-economic development in Vietnam for its contribution to GDP and job creation. The
development of agriculture is largely dependent on non-state sector, including millions small farms producing fresh products and non-state agro-processing enterprises. In the context of economic integration and changing environment, incentives and supports from Government in form of public investment and other favorable policies are curial to boost or generate crowding- in of private investment.

In the last two decades, Vietnam’s government has made a lot of efforts to promote agriculture development. Public investment in agriculture grew at rate of 17% during period 2000-2010, however its share in total public investment has been decreased from 12.2% in 2000 to 5.9% in 2010. Irrigation is the dominant item receiving more than three-fourths of total public investment for agriculture, followed by agriculture production (focus much on seed, seedlings, and other agro-inputs). Agriculture R&D has received less proportionally to other items.

Non–state sector has evolved quickly with the number of enterprise more than doubled during the period 2000-2008 and capital accumulation. Based on GSO data, non-state sector made up of about two-thirds in total investment in agriculture in 2010. FDI in agriculture has decreased over time and accounted for only less than 1% in total FDI during period 2007-2011.

Despite of many incentives made by government to encourage private investment in agriculture, the investors have faced a number of problems and constraints related to land, credit, infrastructure, and others. Improvement of the enabling environment is crucial for promoting investment in agriculture and PPP. Key recommendations are proposed:

**Land use and planning:** Land fragmentation should be solved in order to develop crop production in larger scale. MARD and provincial governments need to speed up the planning of crop production in balance with capacity of agro-processing enterprises. Procedures for acquiring land should be simpler and faster.

**Credit:** More favorable credit policies for agriculture sector: lower interest, appropriate payment period and larger loan size, especially for farmers who engage in primary production.

**R&D in agriculture:** should be strengthened, not for only primary production, but in post harvest and processing (product development, equipments), transfer of new technology and farming practices that widely accepted by customers, such as VietGap and Global Gap.

**Infrastructure:** Upgrading infrastructure for agriculture production (roads, communications, irrigation, disease prevention) to strengthen capacity to prevent diseases, calamities, improve accessibility to market, and to reduce cost. This should be aligned in the planning of material production regions.

**Trade promotion:** Trade promotion program has been implemented, but among the surveyed enterprises there are only two participated in trade fair abroad, and five participated in provincial trade promotion activities. However, most of them felt little or no benefit from these activities, due to weak capacity in organizing and implementation of the program, as revealed by respondents. Therefore, this mission
should be assigned for agency which is professional in implementing trade promotion activities, especially in abroad.

*Supports in agriculture projects:* in case of failures due to risks (calamities, market, diseases). Some additional requirements accompanied with supports for investor should be removed, for example requirement on domestic resources employment, or hunger elimination and poverty reduction. Labor training programs conducted by government should be closely linked with demand of enterprises (for example adoption of Vietgap or global GAP).

PPP is critical in current agricultural development. With lessons from previous efforts to link farmers-enterprises-government-scientists, PPP framework needs to state clearly roles, responsibilities, costs, and risks between the public and private sectors. Government needs to create fair or better market environment; enhancing IPR regulations and efforts of enforcement; adopting preferential tax policy (compared with other industry).

*Others.* Policy introduction should be more transparent and understandable to enterprises. There should be an agency in provinces who could help small and medium agriculture enterprises have voice to policy makers.

**REFERENCES**


GSO, 2011. The Enterprises in Viet Nam 9 years at the beginning of century 21. Statistics publishing house
MARD, 2009b. Decision 2194/QĐ-TTg on the approval of seed and seedling project for plantation, forestry, livestock, and fishery towards 2020.
Table. General profile of the interviewed enterprises

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Star</th>
<th>Main activities</th>
<th>Major Products</th>
<th>% Export</th>
<th>Sale '000 USD</th>
<th>Sale % from Agr.</th>
<th>Lab</th>
<th>Catipa % or</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pacific Company</td>
<td>199</td>
<td>Processing Cucumber: 2,100 tons</td>
<td>100</td>
<td>2,600</td>
<td>100</td>
<td>400</td>
<td>Na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hoa binh Agro-processing company</td>
<td>200</td>
<td>Processing Maize: 19,000 tons Cassava: 2,000 tons</td>
<td>0</td>
<td>6,242</td>
<td>100</td>
<td>59</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Thanh Son company</td>
<td>199</td>
<td>Processing Maize: 25,000 tons Cassava: 500 tons</td>
<td>10%</td>
<td>8,642</td>
<td>100</td>
<td>90</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hoa Binh Sugar jointstock company</td>
<td>200</td>
<td>Processing Sugar: 4,700 tons</td>
<td>0</td>
<td>5,761</td>
<td>80</td>
<td>270</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Phuong Huyen seedlings production and trading limited company</td>
<td>200</td>
<td>Processing Tea: 40 tons Piglets: 100</td>
<td>90% (tea)</td>
<td>96</td>
<td>100</td>
<td>50</td>
<td>na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Dong Giao agro-processing company</td>
<td>199</td>
<td>Processing Canned pineapple, sweet corn, cucumber, onion: 7,000 tons</td>
<td>90%</td>
<td>12,963</td>
<td>80</td>
<td>110</td>
<td>na</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Hong Quang seed company</td>
<td>200</td>
<td>Seed production &amp; trading</td>
<td>Rice seed: 100 tons</td>
<td>0%</td>
<td>1,440</td>
<td>100</td>
<td>18</td>
<td>1.7-25</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Thanh An agro-processing company</td>
<td>200</td>
<td>Processing Canned pineapple: 1000 tons Canned sweet corn: 1000 tons</td>
<td>50%</td>
<td>1,152</td>
<td>100</td>
<td>25</td>
<td>1.8-7.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exchange rate 1 USD = 20,828 VND (Worldbank, 2012)
<table>
<thead>
<tr>
<th>No.</th>
<th>Enterprise Type</th>
<th>Canned Products</th>
<th>Mushroom Products</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Van Dac Phuc processing company</td>
<td>Chilli sauce:</td>
<td>Mushroom seedlings:</td>
<td>90% 1,392 100 50 1.5 mil. USD</td>
</tr>
<tr>
<td>2</td>
<td>C.P. group (Northern)</td>
<td>Animal feeds</td>
<td></td>
<td>Na Na 100 %</td>
</tr>
<tr>
<td>3</td>
<td>Unilever</td>
<td>Tea PPP group</td>
<td></td>
<td>Na Na 100 %</td>
</tr>
</tbody>
</table>

Sources: enterprises survey, 2012
Na: not available

Table: Perception of enterprises in future investment and PPP

<table>
<thead>
<tr>
<th>No. of Enterprises (n=12)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There are opportunities for future investment</td>
<td>Processing and utilise of by-products, increasing demand for high-quality and organic foods, increasing demand for inbred rice seed.</td>
</tr>
<tr>
<td>2. Plan to expand investment (develop new products, increase scale of production)</td>
<td>Dairy cows, organic fruits/vegetables, seed, seedlings, parental seed production, meat processing</td>
</tr>
<tr>
<td>3. Benefited from major incentives created by Government (selected companies and at early time of establish)</td>
<td>Land: for rice seed development; Credit: seed, mushroom, tea, processing; Support to train labor; Infrastructure: seed production (irrigation); Free from VAT for unprocessed/semi-processed products.</td>
</tr>
<tr>
<td>4. There should be</td>
<td></td>
</tr>
</tbody>
</table>
difference in treatment between FDI and the rest Partnership with public sector 4
In rice seed R&D: seed company and Vietnam Agricultural Genetics Institute
In processing of litchi: Dong Giao agro-processing company.
In mushroom seedlings production: Huong Nam mushroom center and Vietnam Agricultural Genetics Institute.
In tea production: Phuong Huyen company and MARD.

<table>
<thead>
<tr>
<th>Problems/constraint</th>
<th>No. of Enterprise (n=12)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land</td>
<td>8</td>
<td>Complicated procedure and very time consuming</td>
</tr>
<tr>
<td>2. Infrastructure</td>
<td>8</td>
<td>Roads for transporting products: poor, inaccessible, narrow, isolated after heavy rain. Irrigation system: weak in primary production areas</td>
</tr>
<tr>
<td>3. Credit</td>
<td>8</td>
<td>Difficult to avail credit, high interest rate (equal other non-agriculture sectors), inappropriate payback period. Credit incentives are difficult and time-consuming to apply for.</td>
</tr>
<tr>
<td>4. Raw material supply</td>
<td>7</td>
<td>In quantity (under capacity), farmers break contracts, bad weather, low yield. In quality: farmers did not follow strictly farming practices, inappropriate harvesting, transporting, preserving. Problem of land fragmentation</td>
</tr>
<tr>
<td>5. Labor</td>
<td>5</td>
<td>Part of farmers did not follow strictly farming practices (for all products, except maize for animal feeds)</td>
</tr>
<tr>
<td>6. Inflation</td>
<td>8</td>
<td>Rising cost of production: transportation, labor, material cost.</td>
</tr>
<tr>
<td>7. Policy</td>
<td>3</td>
<td>Not transparent, difficult to understand, not widely announced.</td>
</tr>
</tbody>
</table>