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Towards A Sustainable Rural Development Policy for Vietnam

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During the ten-year period beginning in 1986, Vietnam achieved substantial economic growth with the adoption of a revolutionary reform program under the slogan *Doi Moi* (renovation). The economy doubled in size and the rate of poverty decreased from 70% to 35%. This progress started slowing down in 1997 as the Asian financial crisis began affecting the Vietnamese economy, exposing its structural weaknesses especially in the State-owned enterprises (SOEs) and banking sectors. Foreign direct investment in Vietnam, one of the main engines for growth, drastically decreased. It took the government four years to realize that a more ambitious and deeper reform program was needed to revitalize the stagnant economy. The signing of the 1991 bilateral trade agreement with the United States marked the beginning of the second and more difficult phase of that transformation.

Despite the overall significant growth during the first phase of economic reforms, the rural economy has performed unsatisfactorily. The labor market unmistakably reflects this shortfall. Out of the estimated 1.4 million new job seekers who enter the labor market annually, only an estimated 300,000 people find jobs. Most of the others remain underemployed in rural areas. Although, the average growth of the industrial sector is much higher (above 10% per annum during 1990-99), and the average rate of agricultural growth was about 4.9% per annum over the same period and is expected to stay over 4.0% in the next five years, the rural economy still appears healthy enough. It is not expected to trigger any substantial labor migration from the rural to urban areas. Currently, about 250,000 people move from rural to urban areas annually, according to the National Population Committee.[1] With three metropolitan centers, Vietnam will not experience the Manila and Mexico City phenomena, also known as one growth pole, in the Philippines and Mexico.[2] However, more efforts should be made to create non-farm employment in rural areas and around small urban centers within the next five years. Otherwise, more people will migrate from rural areas to urban areas. Rural unemployment and poverty will aggravate existing problems in urban areas and will create instability.

Some of the goals of Vietnam in the first decade of the new millennium include: (a) eradicating hunger and hard-core poverty; (b) reducing the malnutrition rate of children from 33% to 15-20%; (c) increasing life expectancy from 68 to 70-71 years; (d) increasing access to clean water in urban areas from 65% to 90%; (e) providing lower secondary education to all; and, (f) restoring forest coverage from 28% to 43%.[3] These ambitious goals can be reached, if Vietnam takes strong economic reform measures, particularly in the rural and private sectors, with an emphasis on improving human capacity, infrastructure, the environment, and public governance.

This paper discusses development of the rural sector. It seeks to address the following issues: the importance of the rural sector; the agriculture and the rural economy; land reforms; highland development; agricultural development; reform of rural SOEs; non-farm employment; rural public infrastructure; financial services; investment in rural areas; and management of natural resources. Agriculture is the immediate but not the only means for raising the standard of living of the rural poor. In addition to farming, other income sources for the rural population include small industries such as fine arts, handicraft, wooden and rattan products, ceramic, labor-intensive agro-processing industries, and garments and textile. These areas need the government's strong support. In the concluding section, the paper proposes a number of measures in the short-run to help the rural sector develop itself. These measures include the removal of government-imposed barriers that have prevented the rural sector from growing with its own potential. Most of these measures do not require any physical resources. The paper also recommends a number of long-term measures regarding infrastructure, agricultural technology, non-farm employment, investment and resource management to bring the rural sector out of poverty and backwardness. Human assets are key factors of rural poverty. This issue would be better discussed in the context of education and social services. Therefore, it is not covered in this paper.

I. Importance of the Rural Sector

The Sixth Congress of the Communist Party of Vietnam approved the *Doi Moi* (renovation) program in late 1986. Its implementation was delayed until 1988 after severe food shortages in many parts of the country and the loss of Soviet bloc aid in 1988-1990 [4]. The government took the first concrete steps to partially dismantle the collectivized agricultural system [5]. It also opened up the economy by issuing the 1987 Foreign Investment Law. Gradually, over the next few years, Vietnam abandoned the old socialist command economy to adopt a freer market economy with private ownership, removal of price and interest rate control, and promotion of foreign investment. As a result, Vietnam changed from a food deficient, near famine country to a food exporter just in a few years. Average poverty level was also reduced. However, not everyone benefited from *Doi Moi.* "Losers" of the "dismantled revolution" have been those with inadequate family support, single mothers, and those who lost all government support under the old regime. "Winners" are those with more labor resources, strong family support, and good health.[6] With GDP per capita of about US$420 in 2001, Vietnam remains one of the poorest countries in the world. Hunger and malnutrition are still common, especially in rural areas. Some 37% of the population lives in poverty. Currently, around 60% of the labor force are unemployed or underemployed.[7]

The rural areas account for about 75% of the total Vietnamese population of 80 million. They are also where about 80% of the poor population resides. About 40% of the rural population—24 million people—live in poverty. Farming is the main source of income. Yet, the agricultural sector accounted for only about 24.5% of the GDP in 2000, providing about 24% of export revenue, and 67.3% of total employment.[8] The income gap between rural and urban areas has been widening. According to Vietnam's General

Statistics Office (GSO), the average per capita income of rural residents is about 3.7 times lower than that of the city dwellers, far below the international minimum poverty level of US$1/day. A study by Nguyen Manh Hung provides similar results [9]: (a) from 1991-1994, the per capita income of urban dwellers grew faster than that of the rural dwellers—the rural per capita income as compared to the urban had declined steadily from 0.28 in 1991 to 0.19 in 1994; (b) the rich-poor gap ratio between the average income of the top quintile and the bottom quintile of the population for Vietnam in 1993 was in the range 9.5-10.5, the highest in the East and Southeast Asian region. [10]

Another problem miring rural development has been policy insensitivity to the obvious regional difference in socio-economic conditions. Although rural-urban income disparities are just as substantial in the South as in the North and urban centers are concentrated in the deltas and costal areas in the South as well as in the North, the climate and geographical conditions in different parts of Vietnam vary significantly, from the North to the South, and from the lowlands to the highlands. The North has four seasons. Both winter and summer are rough. While the weather in the South is moderate throughout the year. It has two seasons: rainy and dry seasons. In addition, the social and political conditions in the North differ from the South. The north, which had been under the centrally planned-economic system for over 40 years, has better social services. The South has a relatively better infrastructure, more avenues for capital, (especially foreign exchange, thanks to remittances from Vietnamese living overseas), more experience with a market economy system, more arable land, and larger farming area per household. Given these variations, the Vietnamese government must set customized and diversified priorities as well as strategies for rural development.

II. Agriculture and the Rural Economy

For an agrarian society afflicted with poverty such as Vietnam, economic development policy must address two fundamental issues simultaneously: economic growth and poverty reduction, particularly in the rural sector. An economic development policy may not benefit the poor unless it promotes the productive use of the poor's most abundant asset – labor and provides basic social services to the poor. The participation of the poor throughout the economic development process must be achieved. The most effective way to attain these objectives is to raise rural and agricultural productivity.[11] Agriculture can play five important roles in economic development beyond the rural sector: supply food for domestic consumption, supply labor and other resources for industrial employment and urban development, increase demand for industrial products, supply domestic savings, and generation of foreign exchange.[12] The linkages between the agricultural sector and the industrial and service sectors potentially facilitate mutual growth through market forces. However, for this mutual growth to transpire, the government needs to make substantial investment in agricultural technology and rural infrastructure including irrigation, offer price incentives to farmers, and promote the development of the private sector.

Centrally planned economies that were cast from the Soviet model, such as Vietnam, failed to grow efficiently. They were typically poor because they focused on industrialization, neglected agriculture, and suppressed the private sector. Many countries broke away from this system in the late 1960s and early 1970s. China and Vietnam adopted economic reforms in 1978 and 1988 respectively. In contrast to China, however, the Vietnamese government adheres to a policy of state-led industrial development, still maintaining an excessive, domineering role in the economy, with a large public sector consisting of about 5,200 SOEs most concentrated in urban areas while neglecting the private sector and the rural economy. Evidence shows that this policy has caused increased unemployment up to the late 1990s. This consequence is consistent with the argument that the creation of labor-intensive jobs in rural areas would be an efficient measure to reduce poverty. By maintaining an overvalued domestic currency, low prices for agricultural products and high prices for manufactured goods, imposing high taxes on land and agricultural exports, and export quotas, the government has successfully maintained low agricultural wages that in turn have generated low agricultural exports and low prices for imported industrial inputs. As a result, it has been easy for domestic industries to make high profits, which are then used to finance state-owned enterprises. The success of development is simply measured in terms of the high level of output produced by these SOEs [13].

On the other hand, market economies have also undervalued agriculture in favor of the industrial sector in a manner similar to that described above, except that, in contrast to socialist economies, market prices and private businesses are allowed to operate. Therefore, market economies do not automatically eliminate poverty unless policymakers emphasize poverty reduction. These are the cases of three East Asian countries Japan, South Korea, and Taiwan, where agriculture and the rural economy have been the key ingredients of the development strategy. The governments of these countries play an important role in guiding the growth process but do not attempt to dominate the economy. The rapid economic growth of East and Southeast Asian countries might be associated with rising total factor productivity in these countries, while it is declining in Africa and Latin America [14]. Taiwan which shares similar agricultural characteristics, would be the best model for Vietnam.

III. Land Reforms

Among with credit, infrastructure, and social services, land is one of four essential elements of rural development. For agricultural purposes, land is a key asset in reducing rural poverty.[15] However, arable land in rural areas of Vietnam has become limited as the population has increased at the average of 1.42% a year, with the consequence that farm lots become smaller and smaller. [16] There are about 20 million farms with an average of only 0.38 hectares (ha) each. The total cultivated area of Vietnam is 7.7 million has, the equivalent of about 21% of the entire country. Yet, 67.3% of the total workforce of 42 million people is employed in rural areas. The average cultivated land per rural worker is 0.27 ha, one of the smallest ratios in the world. [17] In addition, most of the soil outside the Red and Mekong deltas, especially in the lowlands of central Vietnam, is of medium to poor quality. Continuing erosion due to over-

deforestation and inappropriate cultivation on slopes by ethnic minorities in the highlands exacerbate the land shortage. While environmental projects will aim at correcting excessive logging and soil erosion, the objective of land reform is to allow market principles to regulate agricultural land, a scarce resource. Studies show that high rates of rural under-employment are linked to land shortage.[18]

The farming contract system, which will be discussed with more details in section V, increased agricultural output as well as the number of land disputes. As a result, the government of Vietnam issued the first Land Law in 1988, stipulating that land belongs to the public under the management of the state. This rule is based on the socialist ideology. However, contrary to what socialist policies would dictate, this law allows the state to hand over land to organizations as well as individuals (right to use land). It also grants beneficiaries of land the right to sell and buy fruits of investment in lands.[19] The second Land Law was issued in 1993. Although the new law does not allow a private ownership of land, it gives legally authorized land users the rights to transfer, exchange, lease, inherit, or mortgage land. It is reported that the application of the 1993 Land Law differs significantly from one rural area to another.[20] However, this law has been of little use. In practice, many restrictions impede the exercise of these rights. [21]

Land practically cannot be used as collateral. The value of land, which can be used in principle, as collateral, is limited to the usually insignificant amount of land rent, which is already paid. Creditors are not allowed to exchange, transfer, or lease land-use rights. Banks are often reluctant to accept land-use rights as collateral, if the period of rights will be soon terminated. Foreign banks are not allowed to take land-use rights as collateral. Only SOEs are allowed to use land-use rights as capital in joint ventures with foreign investors. However, such a joint venture must obtain permission from the government. Moreover, the Prime Minister must approve projects involving 5 has of land or more in urban areas or 50 has or more in rural areas. Permission of the Chairman of the Provincial People's Committee is required in all other cases.

Due to these government-imposed restrictions described above, the 1993 Land Law has failed to create a market in agricultural land. Moreover, there is a lack of transparency in the application of rules and procedures concerning land rent/lease and settlement of disputes. Most land transactions are still arranged informally and may not be considered legal. The government should take a number of measures to facilitate the implementation of the 1993 Land Law, the exercise of the land-use rights, and the creation of the land market, which in turn would help develop the credit market in rural areas. First of all, the government should clarify and publicize the land-use rights by issuing the guidelines for implementing these rights. The period of land-use rights and the ceilings on land holdings should be increased. It is recommended that restrictions on land transfer, rent/lease, exchange, and conversion should be removed. Foreign and domestic banks and investors should be treated equally regarding land use. Biased treatments in favor of SOEs should end.

In summary, laws and outdated land use policies should be reformed to allow the free market rules to determine its value and uses. Land laws regarding farming should

be changed to allow fewer but larger operations. The government may be willing to abandon its socialist ideology completely to return land to its citizens in the future. A complete privatization of land would result in poverty reduction since land owners are willing to invest more in their land, which they own, for long-term use and enhance productivity and output.

IV. Highland Development

About 30% of the population, including many different ethnic minorities and the most vulnerable and poorest households, live in the highlands, which account for about 70% of total land in Vietnam. Much of the land in the areas is extremely hilly and degraded. A small proportion of fertile land is in the valleys, where many residents build their villages. Highland development has been neglected, due to remoteness, low productivity and lack of essential infrastructure and utilities. Many areas in the highlands lack good education, basic health care, clean water, electricity, and financial services.

Most of the provinces adjacent to the neighboring countries, namely China, Laos, and Cambodia are located in the highlands. Thus, for national security reasons, they are of particular importance to Vietnam and deserve the special attention of national planners. The government has poorly served the ethnic minority communities with different cultures and dialects, which occupy the Northern Highlands bordering China and the Central Highlands bordering Laos and Cambodia, the poorest regions of Vietnam. Moreover, forcible resettlement from indigenous people's properties, which they regard as their ancestral lands, to poor agricultural land without adequate water resources also disrupted their ethnic way of life and social organization. In view of the above situation and land shortage in the lowland areas, it is necessary to develop the highlands for agricultural production and poverty reduction purposes in support of ethnic minorities. More will be discussed later in the section dealing with agricultural development.

The government of Vietnam wants to expand coffee and fruit production and logging operations the Central Highlands. In addition to encouraging populations from the crowded lowlands to migrate to the highlands, the government has also issued a policy of "fixed field/fixed residence," prohibiting the hill people from practicing their traditional swidden (slashing – burning - shifting cultivation). The injudicious and heavy-handed implementation of these policies by local authorities, coupled with corruption, resulted in the large public protests. Thousands of hill people fled to Cambodia when the government sent troops, tanks, and helicopters to suppress the protests.[22] Land redistribution, household resettlement, religion and culture are very sensitive issues, which should be handled with openness, fairness, transparency, tolerance, good understanding and intentions. Local people and non-government organizations, especially tribal people, should be allowed to participate in decision-making process.

In the context of the highland development, the government has begun to build a hydroelectric power plant on the Ayun River in the Gia Lai province of the Central Highlands. The plant will be capable of generating 56.4 million kWh per year. There are

plans to construct another hydroelectric power plant with higher capacity on the same river. More homes in this region are expected to have electricity in 2005.[23] The 1993 Land Law may not be applicable in the highlands, since much of highland is common property, managed by ethnic minorities. The physical condition of the land in these areas is also different from the lowlands. Many ethnic minorities lack formal education and technical skills. Therefore, it is necessary to design a special development strategy for the highlands. Agricultural research and extension services should focus on the condition of the environment in the highlands. Education and vocational training should emphasize on different cultures.

The primary necessity for minorities in the highlands is a sustainable human habitat for self-sufficiency. Technical training and modern equipment are needed to help the hill people replace low yield slash-and-burn farming practices with efficient and diverse food production methods. The reduction of poverty in terms of money, properties, and assets may mean very little to the ethnic minorities.

V. Agricultural Development.

The agricultural sector grew at an average annual rate of 4.3% in 1980-90, and 4.9% during the period 1990-99. Although lagging behind industrial and service sectors, Vietnam's agriculture has performed strongly as compared to other developing countries. This success is attributed to economic reforms, specifically three main substantial policy changes that offered more incentives to farmers. First, Directive 100 issued in 1981, also known as the farming contract system, officially recognized the return of partial responsibility of agricultural production from farming cooperatives to farming households [24]. The farming contract system successfully increased agricultural production and lowered the threat of famine. Prior to this, local farmers and cooperatives had secretly initiated this arrangement for some time. Second, in the same year, the government of Vietnam took another important step to promote deeper land reforms. Third, the promulgation of Resolution 10 in 1988 abolished the collectivized agricultural system [25]. It also redistributed land to farming households in some regions of Vietnam. [26] Technically, three main factors have contributed to agricultural growth—increase in rice productivity, diversification into high-value crops, and expansion of cultivated land. Intensive cropping of paddy also contributes to increases in agricultural output. However, rice still dominates the agricultural sector. It accounts for about 60% of all agricultural land in Vietnam and 45% of agricultural output of which 60% comes from the Mekong and Red River deltas [27]. To raise income of rural areas, it is necessary to further diversify production (*da canh*), and intensify the use of limited land *(tham canh*) in order to increase agricultural productivity. The agriculture sector in Vietnam is traditionally antiquated. Crop quality and productivity are still low, therefore there is a great potential for further growth with the appropriate application of modern techniques. Agricultural growth will still be the main source of increase in rural income and poverty reduction.

1. Diversification of Agricultural Production (*đa canh*)

Crop diversification is often beneficial to individual farmers as well as to the whole country for a number of reasons. First, this method helps stabilize the market in case of price fluctuation, which is quite common for agricultural products. Second, it encourages farmers to grow non-traditional high-value crops. Third, it prevents soil degradation.

The government of Vietnam has been concerned about food security and emphasizes self-sufficiency in food, especially rice supply. It has set limits on rice exports and discouraged farmers to switch from rice to other crops, although in principle, farmers are allowed to produce any crop. Since farmers understand the local markets system and know where they can sell their products to maximize their income, they should be allowed to decide what to produce. Farmers can grow many high-value crops in Vietnam, including but not limited to important industrial crops such as rubber, coffee, tea, black pepper, peanuts, soybeans, sugarcane, coconut, jute, and mulberry.

Technically, farmers need to grow different crops in the same plots, wherever possible. The benefit of this technique known as rotation (*luan canh*) is to balance the chemical contents of the soil of which, nitrogen, phosphate and potassium are three key elements. One often-recommended set of crops for rotation is legume/maize/rice. Diversification is also a practical way to minimize the impact of bad weather. Floods caused serious damages to the summer-autumn rice crop in 2000 in the Mekong Delta[28]. For this reason, The Ministry of Agriculture and Rural Development (MARD) announced a plan to transfer 430,000 ha from rice production in this region to corn, vegetable, cotton, cajuput, fruit trees, dairy, and fish and shrimp farming.[29]

Rice and coffee have been the major sources of Vietnam's agricultural growth. However, given the instability of the world markets of these two main crops, it makes economic sense to diversify away from rice and coffee. The success of Vietnam as a major exporter of rice and coffee will likely lower their international prices and eventually the income of Vietnamese farmers. The Vietnam living standard surveys of 1993 and 1998 show that increases in revenues from rice production accounted for only 25% of the total increase in farming household revenues during 1993-98, while increase in revenues from livestock and aquaculture accounted for 37% over the same period.

Cultivation of mushroom and flowers can be highly profitable as there is a great demand for these commodities in the cities across the country and the world market. The estimated annual domestic demand for mushroom is 160,000 tons, exceeding the domestic production of about 100,000 tons in 2002 [30]. Vietnam exports 40,000 tons[31] of straw mushrooms a year and has become the world's third largest exporter behind Japan and Hong Kong.[32] As the world's major rice producer and second largest rice exporter, Vietnam has produced 20-30 million tons of rice straw a year. This by-product is an excellent bedding material to grow mushroom. Moreover, rice straw is an excellent ingredient for manufacturing straw/stucco construction material, which can be used to build highly energy-efficient, durable and low cost houses.

Vietnam is the world's largest exporter of black pepper, well ahead of Indonesia, India, Malaysia, and Brazil. Its black pepper export earnings increased to about US$113 million in 2002. Cashew is even more important, generating more foreign exchange than black pepper in recent years. Last year, cashew exports reached a record high of US$214 million. With 200,000 tons of cashews produced in 2002. Vietnam has become the world's second largest cashew producer behind India [33]. Dalat, a popular tourist city in central Vietnam, a favorite destination for honeymooners, has now gained a nickname "salad bowl" of Asia. The area produces iceberg lettuce for export to various Asian countries, especially Singapore. Dalat is also established as a major producer of other vegetables and flowers.

Many regions in the North are suitable for cost-effective cultivation of flowers for export markets. Farmers in Lao Cai Province, particularly the Sa Pa district and Moc Chau, have successfully grown high-quality flowers such as roses, daisies, gladioli, gerbera, and orchids. The Tu Liem district outside Hanoi is also well known for growing flowers. MARD estimates that farmers can make up to 20 times more profits from such crops than rice.[34] Sub-tropical and temperate fruit trees such as citrus, prune, pear, peach, apricot, plum, and kaki (oriental persimmon) can grow successfully in the northern region, including provinces Lao Cai, Son La, Lang Son, Vinh Phuc, Phu Tho, Thai Nguyen, Hung Yen, and Nghe An. Such projects would be clearly consistent with the government's objective to eradicate the poverty in the northern highlands and to improve living conditions in rural areas. Unfortunately, these opportunities have not been exploited yet.

While flowers and straw mushrooms are suitable crops in urban and low land areas Vietnam has a big comparative advantage in the rubber industry in the central highlands and the Northeast region of the South Vietnam, due to its suitable climate, appropriate soil, available land, low cost of production, and extensive experience. Vietnamese rubber has gained reputation for good quality. Rubber trees traditionally grow in the Dong Nai, Tay Ninh, and Song Be regions in South Vietnam predominantly in latosol soil under very humid climate and relatively high temperature. They can also grow well in the central highlands, including the red soil areas of Dac Lac and Kontum provinces, and adjacent uplands of the Central Coast. The expansion of the rubber industry to central Vietnam is consistent with the government's goals of reforestation and forestry conservation. This strategy also help reduce poverty of ethnic minorities in those regions, which were degraded as a result of defoliation during the war, over logging, and traditional swidden (slashing – burning - shifting cultivation).

2. Intensification of Agricultural Production (*tham canh*)

A study by the Asian Development Bank shows that increases in labor and capital accounted for 87% of the increase in agricultural output during 1996-98 [35]. Increases in cultivated areas were attributed to an additional 9% increase in the output. Only 4% of the increase could be explained by technological improvements. Statistics released by the government also indicate that employment in the agricultural sector and value added per agricultural worker has remained unchanged over the last 10 years.[36]

This suggests that agricultural productivity has not improved. Vietnam has to make strong efforts to invest more capital and high technology to maintain an annual growth rate of 4-5% for agricultural production over the next decade. Increase in labor is out of the question, since both unemployment and underemployment are prevalent in the rural and agricultural sectors. Considering that the prospects for expanding arable land are also very limited, the only viable option available for Vietnam is to increase agricultural productivity with the application of more capital and technology.

First of all, the government should invest more in agricultural research and extension. Public spending on research in Vietnam accounts for only 1.7% of public agricultural expenditure as compared to 6% in China and 10% in Thailand and Malaysia.[37] The government allocates only US$30 million from the budget, and employs about 2,800 extension workers, whose responsibility is to train 10 million farming households to use fertilizers and pesticides, select the best crop varieties, use new farming tools and obtain farming services. They are also supposed to help farmers to obtain loans, sell agricultural products, and apply for land use permits. C. Peter Timmer emphasizes the necessity for agricultural research and application of new technologies.[38] The most important issue here is not the number of extension workers, but their out-of-date technical competency, which is about 15 years behind. Moreover, these government workers also compete against the very farmers they serve with their own for profit farms and services-for-hire. This conflict of interest needs to be resolved.

With regard to the issue of improving agricultural productivity, Vietnam, as a matter of priority, should implement a number of projects including: development of irrigation systems in the Mekong Delta and Central Highlands; development and transfer of technology, with focus on livestock-fodder farming systems; promotion of upgraded seeds; improvement of taste and yield of genetic cultivars for rice; introduction of new rice varieties; extensive vaccination and increased supply of protein for livestock (fishmeal, groundnut and soy meal); pest management; horticultural production; and development of agro-forestry strategies for the highlands.[39]

Another way to increase agricultural productivity is to mechanize farming operations. The Mekong Delta is the best region to accelerate such a program. In 2000, there were about 45,000 small tractors, 40,000 rice threshing machines, and 360,000 water pumps in the region. [40] Each tractor serves 1,300 farmers or 170 ha of cultivated land on the average. These figures are quite high as compared to those of other Southeast Asian countries. It is necessary to ease restrictions on agricultural land holdings to promote large private farms that are suitable for more efficient use of farming machines. Priorities should be given to ploughing, transplanting, harvesting, and water pumping for irrigation, as well as using threshing machines to reduce post-harvest loss to below 7%.

In the absence of a comprehensive marketing strategy for agricultural products, improved productivity only leads to market price collapse and puts more farmers in deeper poverty. Vietnam needs to tackle three issues at the same time in order to compete successfully with foreign producers: improving the quality of agricultural

products, increasing productivity, and reducing the cost of production. Vietnam was a well-known exporter of cheap but low-quality rice in the early 1990s. Thanks to economic reforms, the quality of commercial rice has improved, at least in terms of rice with a low broken percentage. Farmers in the Mekong Delta have grown high-quality rice varieties.[41] The volume of high-quality rice exports with a low broken percentage of 5-10% grew from only 1.8% in 1988 to around 53% in 1998 as a result of improved milling technology. In contrast, over the same period, low-quality rice with a high broken percentage of 35% and above reduced from 88% in 1989 to 36% in 1998.[42] The prices of Vietnamese rice exports have been catching up with those of Thai rice, and gradually reduced to about US$10-US$20 per ton below those of Thai rice of the same quality, compared with US$100 in the early 1990s. [43] As a result of improved quality, exports of commercial rice from Vietnam have sharply increased during the last decade.[44] Vietnam exported 3.2 million tons of rice in 2002 as compared to 3.5 million tons the year before. However, rice export revenues increased to US$600 million from US$544 million. This was due to the fact that improved quality raised the average price of rice from US$156 / ton to US$186 / ton. Exports of some other agricultural products such as corn, soybean, and peanut have not been so successful since domestic prices are higher than world prices. [45] A similar situation exists for vegetable oil and fishmeal.[46]

At this stage of agricultural development, production is no longer a major concern, hence Vietnam needs to pay attention first to production quality, post-harvesting processing, and marketing. It is not production that Vietnam lacks. “The problem with rural farming poverty is not that the farmers can not grow. It’s that whatever they have been growing (or know how to grow, or are familiar with growing) have little value or have no markets. Prices of vegetables in Dalat in 2001 were so low that some one fourth of all vegetables were left to rot in place. Increased productivity to produce even more Dalat grown vegetables would not solve the problem—developing markets is what urgently needed.” [47] Shrimp, coffee, sugar cane, catfish, and black pepper have been facing similar problems in recent years.

Irrigation is a key factor for agricultural intensification. It is critical for reducing the risk of drought, and raising yields, and expanding cultivated areas. Irrigated land in Vietnam amounts to about 2 million hectares. It accounts for only 26% of total cultivated areas. Another one million hectares are partially irrigated because the available irrigation infrastructure, which is mostly located in the Mekong and Red River Deltas are badly deteriorated. There is an urgent need to rebuild the irrigation system.

VI. Reform of Rural SOEs

The sugar industry is a striking example of the SOE problem in Vietnam. Of 43 sugar mills in Vietnam, 37 are centrally or provincially owned SOEs. They all are unprofitable.[48] The sugar industry came to life as a result of the government’s decision in 1994 to achieve sugar self-sufficiency by the year 2000. Farmers have been encouraged to grow sugarcane to supply raw material to many new sugar refineries. Even though the total cane growing area in 2000-01 was 320,000 hectares, it has never been possible to produce enough cane to meet the demand. The shortage of sugar

cane has pushed up its price with the result that farmers have been induced to grow sugar cane in inappropriate areas. Consequently, the average yield has been quite low, only 50 tons of per hectare. The IMF reported that in 1999 prices of domestic sugar were 25% higher than those of imports.[49] It is reported that around the end of 2002, the average price of domestic sugar was about US$472/ton. This was 1.65 times and 1.88 times higher than sugar from India and Thailand, respectively. On top of that about 1,000 tons of sugar were brought into Vietnam illegally every day in 2002, according to domestic sugar manufacturers.[50]

With adequate flat land, good rainfall, reasonable temperature, and sufficient sunshine in the South, Vietnam is a country suitable for growing sugar cane. [51] It is true that bad weather conditions can be partially blamed for the reduction of sugar cane supply. However, inefficiency and mismanagement are major factors for the failure of Vietnam's sugar industry. If sugar mills that consistently operate at a loss are allowed to close down and other SOEs are equitized, they will have a much better chance to function efficiently. Their products will compete effectively with imported sugar. Ultimately, this will help six other private sugar mills, five of which are foreign invested joint ventures to become more profitable.[52] After a long inaction period, the government has been finally taking steps to close down unprofitable plants.

In addition to its involvement in sugarcane and refined sugar, the government has also been involved in other agricultural processing businesses such as production of salt, tea, fish sauce, cigarettes, paper and paper products, and sawn wood. Studies by the World Bank and IMF show that SOEs in rural areas are the weakest government-owned units as compared to SOEs in urban areas. They typically operate at a loss despite all kinds of financial supports from the government, including free working capital, government guaranteed interest free loans, reductions in value-added tax, and direct lending from commercial banks.[53] The World Bank estimates that the production costs of Vietnamese private producers were 40% lower than SOEs.[54] An IFPRI survey also reveals that the marketing costs of SOEs are between 4 and 16 times higher than those of private traders.[55] A bold SOE reform program by the government should help achieve a long-term solution to the problems of the sugar industry as well as other rural SOEs. The effort to maintain the dominance of the state enterprises has been costly to Vietnam. According to the Ministry of Finance, the total debts owed by 5,175 SOEs in Vietnam amounted to US$6.9 billion at the end of 2002. These SOEs own about 80% of state assets but contribute only 30% to the budget [56]. The longer the government postpones taking action, the more capital resources will go down the drain at the expense of other rural development projects. In contrast, China has strongly embraced SOE reforms and promoted non-state enterprises, successfully creating off-farm employment and accelerating rural development.

Since the *Doi Moi* program began in 1988, the industrial sector has grown more rapidly than agriculture. Foreign investment has played a key role in this process. However, industrialization has been confined mostly to urban areas. The same policy that favors SOEs and the urban sector over private enterprises and the rural sector should be blamed for the failure of the rural industrialization program in Vietnam. In

contrast, rural industry in China has flourished since reforms began in 1978. Given the fact that the agricultural sectors of both countries have performed well during the last decade, the slower growth of rural income in Vietnam as compared to China can be attributed largely to under-performing rural industry and other non-farm activities.[57]

VII. Non-farm Employment in Rural Areas

Agriculture provides jobs and income to the rural poor and generates export revenues, hence it needs the government attention in the short run. However, Vietnam needs to learn from the mistakes of the past and avoid over-dependence on agriculture in the long run. A strategy to provide non-farm employment in the rural area is crucial in this context. Since employment in the large-scale industrial sector declined from 3.8 million in 1990 to 3.5 million in 1998,[58] priority should be given to the development of infrastructure and small industries in smaller centers, rather than the three largest cities — Hochiminh/Dongnai/Vungtau, Hanoi/Haiphong/Quangninh, and Danang/Quangnam/Quangngai. Examples of such small industries include fine arts and handicraft, processing and preservation of agro-forestry and fishery products, construction materials, wooden furniture, rattan products, ceramic and glassware, garments and textiles. With the expansion of industrial zones in Thai Binh province, the government appears to have initiated this new strategy in support of small industrial and commercial centers and to attract foreign and domestic projects in handicraft, mechanical engineering, electronics, food processing, textile and garment industries. According to the government estimates, these industrial zones in Thai Binh could generate jobs for 15,000-30,000 workers by 2005.

Services in rural areas such as tourism, construction, transportation and other services that support rural production and inhabitants' lives also create job opportunities. However, the most important requirement for the strategy of promoting non-farm employment to succeed is to increase rural income through an increase in agricultural productivity at the initial stage. This situation seems self-contradictory but it needs to be overcome to break the poverty cycle. Such a first successful step will in turn effectively generate demand for non-agricultural goods and services. [59]

Studies by the World Bank[60] and the Asian Development Bank[61] show that labor-intensive agro-processing industries, food processing in particular, and related services, do not only increase the value of and demand for agricultural products. They also minimize post-harvest loss, stabilize the supply - demand difference, and create jobs for the rural sector. A study in the U.S. shows that at the beginning of the 20th century, out of every US$100 spent on food, US$60 went to farmers, and US$40 to post-harvest operators. By the end of the century, this ratio had changed to US$22/US$78 with the larger share going to processing, storage, transportation, packaging, and marketing activities. [62]

VIII. Rural Public Infrastructure

Less than 20% of households in the rural areas have electricity, and about 30% have access to safe drinking water. The road system in Vietnam is very weak with less than 10% in good condition. The situation of the road network in rural areas is worse. Many roads cannot be used in the rainy season. About 20% of remote villages are not connected with other parts of the districts by cars. For decades, public investment in rural infrastructure, including energy, water supply, health care, and education has been too little. Currently, most of the 70 universities and 137 colleges, which together train about 807,000 students, are located in Hanoi or Hochiminh City.[63]

The foregoing trend should be corrected. Massive investment in rural infrastructure is needed if Vietnam wants to realize the goal of achieving food security.[64] The improvement of rural infrastructure does not only increase agricultural productivity but also develops non-agricultural production and trade. Providing the private sector with investment opportunities in rural infrastructure, and also allowing local authorities to plan and carryout local infrastructure projects could help achieve this. Many studies indicate that investment in infrastructure offers high rate of economic returns, normally in the range of 25 – 30%. Building an adequate rural infrastructure, which includes rural transportation, electrification, safe drinking water, irrigation, and service centers and markets, is critical to eradicating poverty in rural areas.

In addition to the improved irrigation system as described above, Vietnam needs a more efficient plan for warning and preventing natural disasters such as floods and typhoons. Typhoons can be predicted three to five days in advance. Even though flood forecasting on small rivers is difficult, it is sufficiently easy on major rivers. Sizeable government investments are required to take structural measures such as building more dykes and repairing existing ones.[65]

IX. Financial Services in Rural Areas

Besides the distribution of land and infrastructure improvement, an equally important governmental service to rural areas is rural credits. The financial services in rural areas are provided by the Vietnam Bank for Agriculture and Rural Development (VBARD), five State-Owned Commercial Banks (SOCBs), about twenty rural shareholding banks (RBs), 970 People's Credit Funds (PCFs), and seventy Credit Cooperatives (CCs). In 1999, formal lending to rural areas was about US$2.9 billion, serving about 50% of the rural population. VBARD provided 80% of these loans, which is equivalent to US$2.3 billion.[66] In many provinces, VBARD is the only formal source of financial services. The objective of these financial institutions is to provide credit to farming families and micro and small rural enterprises (MSEs) in rural areas.

All rural financial institutions, except for SOCBs and VBARD, are small. They have experienced low level of equity, large non-performing loans, low profitability, and the lack of provisions for handling loan losses. Management and staff of financial institutions have inadequate knowledge of banking operations. They are often directed to favor SOEs at the expense of the private sector, even though SOEs in rural areas are the weakest. The labor/capital ratio of private enterprises is ten times greater than that

of SOEs, yet, private enterprises and rural households have little chance to obtain loans. There is a large shortage of medium-term credits for investment in perennial crops, livestock, aquaculture, machinery and vehicles for farming, processing, and marketing activities, all of which require at least a year or longer to repay. In order to correct this situation, it is necessary to: (a) reform the banking system to serve rural areas; and (b) increase access to financial services in the rural sector. In connection with these, the deregulation of interest rates and removal of government-directed lending are the most important tasks.

These objectives can be achieved with the following reform programs: (a) improving the legal, regulatory and supervisory framework; (b) restructuring SOCBs and Joint Stock Banks (JSBs); (c) improving the financial performance of the banking system; (d) leveling the playing field for all banks; (e) improving transparency and financial information flow; (f) expanding medium-term lending with external funding support; (g) training management and staff in commercial banking operations and in central bank supervision; and (h) promoting savings to mobilize funds.

X. Government and foreign Investment in Rural Areas

From 1996-2000, 69.2% of total public investment is directed to the Red River Delta, the Southeast region, and the Mekong Delta, the three richest regions of Vietnam, which are less predominantly rural as compared to other areas in the country. The three poorest regions, namely the Northern Mountains Region, the North Central, and the Central Highlands received only 21.3%.[67] Public investment in basic infrastructure should be reallocated to rural areas in order to promote rural development through projects such as rural transport, public utilities, health centers, and educational institutions. Such public works will encourage additional private investments and industrialization of the rural sector.

Post-harvest losses have been discussed briefly in the agricultural intensification section above. As post-harvest technology is expensive to farmers, public investment can play a key role in the area, providing incentives to the private sector to invest in post-harvest operations for reducing losses during food drying, storage and transport operations.

With the integration of Vietnam into the regional and global economy, foreign investment was disbursed in the economy at an average of US$1.6 billion a year during 1994-99. However, foreign investment in agriculture, forestry and fishery accounted for only about 6%.[68] As of December 2000, there were 340 FDI agricultural projects in Vietnam with a total capital of about US$2.3 billion, compared to five projects with a total capital of US$2.8 million in 1995. Foreign investments concentrated on the following areas: farming, livestock, fish and seafood, agro-processing, and feed.[69] As rural infrastructure continues to be improved, it is expected that foreign investment will expand gradually into production areas and the rural sector.

In 2001, the government of Vietnam announced a policy to drive up FDI in agriculture by giving incentives to foreign investors who want to invest in the following important areas: developing superior breeds of livestock, plant saplings, seeds, farm and forestry products for export, meat and diary industries, timber plantation and processors, production of fertilizers, veterinary medicines, insecticides and farming machinery.[70] These labor-intensive projects would help to increase employment in the rural sector.

Since the reforms began in 1988, the government has approved 4,582 foreign-invested projects, with a total committed capital of US$50.2 billion. However, only US$20 billion has been actually disbursed. The operations of about 884 projects, worth US$10.5 billion have been discontinued. Vietnam has failed to attract more FDI due to numerous reasons: (a) high charges for the use of infrastructure;[71] (b) unequal income taxes between foreign and local businesses (higher than other Asian countries);[72] (c) shortage of materials and services; (d) corruption, red tape, and lack of legal transparency; and (f) the 1997 Asian financial crisis.

XI. Management of Natural Resources

Vietnam lost about 100,000 hectares of forest annually during the past 50 years. The natural forest shrunk from 43% of the land area in 1945 to 26% in 1990. This was due to a combination of several key factors: rural poverty, over logging, illegal cutting, insufficient arable land, and inappropriate resettlement. Logging by State Forestry Enterprises (SFEs) produced an average of 300,000 – 450,000 cubic meters of timber annually from natural forests. Construction of roads, dams and high voltage power lines, and fires also contributed to this problem. Thanks to the reforestation effort during the last decade, the forest expanded to 29% of the land area in 1999.[73] Nonetheless, the consequence of deforestation has been the flash floods and sedimentation that Vietnam has been experiencing with their heavy toll on houses, properties, and human lives in lowland areas.

The government's stated goal of restoring forest coverage from 28% to 43% seems overly ambitious. Due to corruption by forestry officials and rising domestic demand for timber products in light of high import taxes, coupled with slash-and burn practices in the highlands by minorities, saving remaining natural forests is a big challenge to the government and deforestation seems to continue in Vietnam.

Although water is relatively abundant, its quality has been on the decline due to pollution caused by rapidly rising agricultural, industrial, and household uses. Much of the existing irrigation, drainage, and flood control infrastructure in rural areas have deteriorated. The demand for water in urban areas is expected to double in the next two decades yet there is no good drainage system.

Vietnam has a total wetland area of about 3.9 million hectares. Protected areas account for only 1.6% or 62,083 hectares. The two most important wetland areas in Vietnam are located in the Mekong Delta, which covers an area of about 3.9 million

hectares and the Red River Delta, which also covers 866,000 hectares and is the most densely populated area in the world.[74] Although wetlands provide important habitats for people as well as wildlife and play an important role in regional and global ecology, Vietnam lacks a comprehensive wetland management plan.

Aquaculture is a highly profitable activity. However, it has created some pollution problems harmful to mangrove forests, wetlands, and nearby areas. Over fishing near the seashores has been a reason for declining catch. These symptoms indicate that natural resources in rural areas have been deteriorating.

Land tenure, long-term conservation practices, and transformation of unsustainable agricultural practices are important issues to be addressed. Fishing in offshore deeper waters is a measure encouraged by the government. Expansion of protected areas to conserve nature has also been considered by the government. In addition to these, forest restoration should also be given priority. More imports of timber must be allowed to reduce the use of domestic products.

XII. Conclusion

The majority of Vietnam's poor are located in the rural areas. A national economic development strategy will fall short of expectations, if it cannot not raise the standard of living of this majority of the population, particularly, those who choose to live in the highlands, which account for 70% of total land area of Vietnam. Failure to improve rural lives would result in pronounced widening of the income gap between rural and urban areas, translating into a divergence of the quality of health, education and other socio-economic indicators between the two groups of the population. This phenomenon will lead to an unwanted creation of crowded megacities, transfer of rural poverty to the urban sector, and lower overall productivity leading to economic stagnation. "All in all, the situation reflects an 'interlocking log-jam of disadvantage' that afflict, in a disproportionately large measure, the rural population—especially the rural women, the landless, the smallholders, pastoralists, and the indigenous minorities," declares Nwanze Okidegbe.[75]

During the 40-year long history of wars, from 1930 to 1975, except for a short period of peace from 1955 to 1960, the rural sector suffered disproportionately in terms of property damages, losses of human lives, and disrupted economy. In times of peace, it deserves more reconstruction and development efforts from those, who used to be based in rural areas, and now hold power and live in the cities. Vietnam has undergone a profound transformation since the *Doi Moi* program started in 1988. Substantial economic progress has been made. The annual average income per capita has doubled to US$420. Even though the role of the rural sector is critical to this growth strategy, the rural sector with all its great potential, has not been allowed to fully develop due to bias against the rural and private sectors.

The government can take a number of immediate measures in the short run within its own authority and capacity to help the rural sector develop itself: (a) allow farmers to

decide what they want to produce; (b) remove the rice export restrictions—dismantle the rice export quota system by progressively raising export ceiling or replacing quotas with export taxes, which should be completely removed in the long-term; (c) allow the private sector to enter the rice export market; d) end subsidies to state-owned sugar refineries and agricultural SOEs, which keep losing money, and allow competition in domestic production; (e) promote the private sector in rural areas by ending policies in favor of SOEs; (f) remove restrictions prohibiting farmer rights to transfer, exchange, rent/lease, inherit, and mortgage land; (g) extend the duration of land-use rights and raise maximum land holdings; and (h) provide credit to farmers through a reformed rural banking system.

Some recommended long-term measures include: (a) improve rural public infrastructure; (b) develop the highlands; (c) improve agricultural technology; (d) promote non-farm employment; (e) better manage natural resources; (f) expand research and extension activities; (g) increase investment in rural areas, and (h) improve rural data, which is critical to policy planning.

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[11] C. Peter Timmer, "Agriculture and Economic Growth in Vietnam," Research in Domestic and International Agribusiness Management, Volume 12, JAI Press: 1996, 161-203.

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[16] General Statistical Office, "Statistical Yearbook 2000," Hanoi: 2000.

[17] According to the 2002 World Bank figures, there is an average of 0.25 ha per worker in the north and 0.5 ha per worker in the south (World Bank, "Socialist Republic of Vietnam – Agricultural Rehabilitation Project," Project Performance Assessment Report, Washington, DC: June 11, 2002.)

[18] Asian Development Bank, World Bank, and UNDP, "Vietnam 2010 – Entering the 21st Century," Washington DC: December 2000, 41-57.

[19] Rita Liljestrom et al., "Profit and Poverty in Rural Vietnam: Winners and Losers of a Dismantled Revolution," Curzon Press, United Kingdom: 1998, xvi.

[20] Rita Liljestrom et al., "Profit and Poverty in Rural Vietnam: Winners and Losers of a Dismantled Revolution," Curzon Press, United Kingdom: 1998, 11-12.

[21] First of all, the government has not issued any decrees to explain how these rights can be utilized. Second, the law imposes maximum agricultural land holdings of 3 ha in the South and 2 ha in the North for annual crops. In case of perennial crops, the limits are 10 ha for lowland and 30 ha for mountainous and midland. Third, the law sets a relatively short duration of land use rights to annual cropland at 10 to 15 years, and extended periods for tree crops. Fourth, the conversion of paddy land to other uses is practically prohibited. In most cases, such a conversion requires the prime minister's approval. Fifth, long-term land transfers are restricted to certain special circumstances (moving out of the area, inability to use the particular piece of land), and require permission from local authorities. Sixth, renting/leasing of land for annual crops or aquaculture for more than three years is not allowed, except with special government permission. Seventh, sales and exchanges of land are subject to tax. The tax rate is set at 50% of the land value if rice-growing land is transferred from one household to another household for growing different crops. The transfer tax rate is 30% in cases of industrial construction.

[22] David Brunnstrom, "Military Patrols Vietnam Highlands After Protests," Reuter, Hanoi: February 8, 2001.

[23] Asia Pulse, "New Hydro-Electric Power Plant in Vietnam's Central Highlands," Hanoi: December 26, 2002.

[24] Decree 100 (Chỉ Thị 100) on the management of the cooperatives was introduced in 1981. It defines eight kinds of work in rice production. Some works were contracted to individual farmers. Others were carried out by cooperatives. These kinds of work are (a) production of seeds; (b) preparation of land; (c) sowing and transplanting; (d) irrigation; (e) fertilization; (f) tending; (g) pest control; and (h) harvesting.

[25] Resolution 10 (Nghị Quyết 10) was issued by the Politburo of the Vietnamese Communist Party to transfer at least five kinds of work to farming households.

[26] Adam Fforde and Steve Sénèque, "The Economy and the Countryside: The Relevance of Rural Development Policies," in *Vietnam's Rural Transformation,* Benedict J. Tria Kervliet and Doug J. Porter, eds., Westview Press, Boulder: 1995, 97-138.
[27] Asian Development Bank, World Bank, and UNDP, "Vietnam 2010 – Entering the 21st Century," Washington DC: December 2000.
[28] The Mekong Delta has more than two million hectares of paddy field, accounting for 48% of Vietnam's total paddy area and produces about 55% of total rice output (Hong Van, 2001).
[29] Hong Van, "Mekong Delta to Convert 430,000 ha of Paddy Fields," Saigon Times, Ho Chi Minh City: April 17, 2001.
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[32] Xinhua News Agency, "Vietnam Becomes World's 3rd Largest Straw Mushroom Exporter," Hanoi: November 20, 2002.
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[39] World Bank, "Vietnam – Agriculture for Sustainable Rural Development," a Sector Report No. 17278-VN, Washington, DC: January 12, 1997.
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[42] Nguyễn Kim Vũ, "Nâng Cao Chất Lượng và Giá Tri Nông Sản Hàng Hóa," (Improving the quality and value of agricultural products), MARD, Hanoi: 2000.
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