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Changing the Life of Vietnamese farmers

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Seventy eight percent of Vietnam's population live in a rural environment. For centuries these rural folks have depended on agriculture for their livelihood, and the trend continues even into this century. At the very start, there was not much differentiation between townsfolk and farmers, but as time went by, with urbanization taking place and new entrepreneurs spring up in towns, the rural-urban divide becomes wider and wider. Today the per capita income of Ho Chi Minh City reaches USD 2,000 while that of remote provinces in the north is approximately USD 300 and in the south at USD 430. The government has been putting in a tremendous effort and numerous foreign development agencies have invested hundreds of million dollars to uplift the livelihoods of rural Vietnamese. The remarkable achievements in poverty reduction have been recognized worldwide, and excellent production surpluses attained, but ironically an increase farmers' income has been quite difficult.

Under the natural, or rainfed condition, rice farmers in each region of Vietnam used appropriate traditional rice varieties in each cropping season - the early, medium, and late duration rices. They used natural agronomic practices – that today we call organic farming. The famous Vietnamese scholar in agriculture Le Qui Don (1724-1784) in his book *Van dai loai ngu*[1] (***Lexicon from the Book Tower***) recorded that farmers incorporated rice straw into the soil, or some even grew a leguminous crop (usually mungbean) before transplanting rice, to nourish the rice soil. Insects and diseases were unknown. Toward the last decade of the 19th century, more canals were excavated in Vietnam, especially in the Mekong Delta, mainly for navigation and transportation. As new canals were opened, people settled along the banks and grew more rice, making the southern part of Vietnam the most important rice exporting region, not only for southeast Asian countries, but also for Africa and Europe at the beginning of the 20th century. The first export of rice was a shipment of 264,000 liters to Thailand in 1789. At that time Vietnam was known to the world by the name "*Saigon rice"* - the position Vietnam kept until 1968 at the height of the Vietnam War.

Vietnamese farmers' traditional practice of rice growing started to change when the first seeds of IR5 and IR8 rice were introduced to the Mekong Delta. The whole package of new science and technology with inorganic fertilizers, herbicides, insecticides, fungicides, rodenticides... accompanied these new non-photosensitive, short duration, high yielding rice seeds. Soon after some smart

[1] "Van dai loai ngu" translated by Tran Van Giap, published by The Culture Publishing House of the Culture Institute, Hanoi, 1962.

village mechanics in Phu lam village of Angiang province invented the *"shrimp tail pump"* to irrigate the rice fields with Mekong water during the dry season, thus opening up the second rice crop of the year – the dong xuan (winter-spring) crop. That was the beginning of the Green Revolution in Asia which occurred during the fiercest moments of the Vietnam War. The Green Revolution continued at an even faster pace after the end of the war in Vietnam, with the *doi moi* policy of the government. The new rice varieties spread wherever irrigation water was made available, especially in the floating rice areas of the Mekong Delta. Around 1990, in Angiang - the heart of the floating rice area, encouraged by rice-minded local leaders, farmers built high dikes around their rice fields to grow a third rice crop. Other farmers bravely ventured into problem soil areas such as the Plain of Reeds, the Long xuyen – Ha tien quadrangle, and the Uminh forests. By trial and error and supported by appropriate scientific findings made by the joint Viet-Dutch university projects, slowly they found ways to turn the highly acidic soils of the Plain of Reeds into the highest yielding rice areas, such as the Moc hoa district of Long an province where the rice production is more than 4,000 kg paddy per capita per annum. The industrious and intensive farmers of the Mekong Delta thus produced enough rice to feed the whole country and at the same time helped Vietnam to re-enter the world rice market, starting 1989. In the meantime, animal husbandry and aquaculture also made progress in various sustainable farming systems: integratng fish, shrimp, or duck farming in the rice field.

Science and Technology Influences Socio-Political Changes

From the nomadic period when various tribal communities were free to wander wherever suitable, to feudal times when peasants lived the fate as tenants under local landlords, then later on during colonial times, under the French landlords, the farmers subsisted on whatever they could save. During the anti-colonialist struggles and then the anti-imperialist wars, farmers played a dual role: in food production for the country while participating in the revolution. After a thousand years under Chinese domination, a hundred years colonization by the French, and twenty years in the most cruel war when more than six million tons of bombs and napalm, and more than eleven million gallons of Agent Orange were dropped on our land, Vietnamese farmers' lives were always one of hardship.

After the end of the colonial war in 1954, the northern part of Vietnam underwent a thorough land reform, an opportunity for the tenants to overturn their landlords. And under the new regime put in place during that time, farmers had to follow a collectivized life, as a sacrifice to the cause of liberation of the southern part of the country. Again they suffered more hardship. Then came the end of the war in April 1975, and with it the reunification of the country! The collectivization system in the north was immediately imposed on the southern peasants, the majority of whom for a long time had acquired land ownership under the previous regime. The new policy had ignited passive resistance among southern farmers, causing stagnation in food production due to farmers' refusal to till the land. Whereas

most farmers produce only just enough rice for their own consumption during the 1975-1980 period, under the guidance of my university, The University of Cantho, some experimental groups of farmers in Soc trang province clandestinely practiced a prototype of the “contract system,” which successfully yielded surplus rice for their families and also for local government shops. I reported this news during my regular TV and radio programs and in the Tin Sang newspaper on September 2, 1980. That was the start of the new life for all Vietnamese farmers under the socialist government: the contract system was recognized officially by the Communist Party in 1981, and then decollectivization of all cooperatives and production groups followed. With strong scientific backing, we proved that we could design an appropriate development model that was eventually moved up to the policy scale. The new Land Law was passed by the National Assembly in 1986, and was fully implemented in 1988. Enjoying freedom from restricted production under the compromised land reform, farmers boosted production at the rate of a million metric tons of paddy per year. With this production surplus, farmers had to face another dilemma: how to market their excess paddy? This led to the next political decision: the open door for export of rice surpluses starting in September 1989. However, due to an inefficient marketing system in which many middlemen operate between the farm gate and the export enterprises (mostly state-owned), the disadvantages again fall on the farmers; the more remote the rural areas, the more they are marginalized.

Marketing Agricultural Products

Not only suffering from the domestic marketing system, Vietnamese farmers have to face strong international competition when entering the world market at this late stage. Presently, most Vietnamese farm products are more expensive than foreign products, but the quality is lower because the framers often do not strictly adhere to the technical procedures recommended by specialists in the field. For example, premium quality Thai rice is a low yielding, traditional variety that is produced in natural, rain-fed conditions without much fertilizer or pesticide application. Hence, the production cost of Thai rice is much lower than Vietnamese rice which is usually of the high-yielding, short-duration variety that must receive heavy inputs. Farmers have to pump out water to sow seeds and later pump in water to irrigate. In addition, they have to apply large amounts of fertilizer, then to use pesticide to protect from various pests. Towards the end of the growing phase, they have to continuously pump out water to prevent submergence of the crop. Other crops have a similar fate. In 2004, Vietnam imported about 92 percent of its milk powder, 85 percent of its cotton, 75 percent of its paper pulp, and more than 300,000 tons of corn and soybeans to meet the demands of the domestic food processing industries. In other words, according to the Minister of Agriculture and Rural Development, it is much cheaper to import these agricultural products than to bear the high production costs of locally produced raw materials. The Government *needs to invest more in research and development* to remove these constraints and lower the production costs of our farm products.

Furthermore, due to fragmented production by individual farming households, whose land holdings average less than one hectare apiece, it will be impossible to respond to foreign buyers with large shiploads at any given time. The government has to improve agricultural policy so the rice industry can benefit from economies of scale in the production of exports (i.e. we need more attractive regulations for agricultural cooperatives and private farmlands).

As better crop varieties are bred, especially by foreign or joint venture seed companies, the intellectual property rights provisions in the agricultural clause of the WTO will prevent poor farmers from freely multiplying the seeds of the patented crop varieties and animal breeds. As a result, poor farmers may not be able to take advantage of new technologies.

Foreign agribusiness companies will come in to service Vietnamese farmers, and thus will compete with local less efficient companies, which may eventually be pushed out of production. For example, almost all Vietnamese animal feed companies went bankrupt when the Thai company, The CP Group, and the American company Cargill, established feed mills in Vietnam. Another example is that 80 percent of the cooking oil used in Vietnam has to be imported because local industries are too inefficient in converting copra, peanut, soybean, etc. into oil. Of course, livestock growers will enjoy cheaper and more efficient feeds than before. The public of course cannot continue to support inefficient companies, whether they are state or privately owned.

Globalization - Benefits and Costs

The latest change in our farmer's lives is being shaped by the pressure of globalization. Weighing the benefits and costs of joining the various bilateral, regional and international trade groups, at first glance we see more threats than benefits. But since there is no other way than to join the groups, especially the WTO, the Vietnamese farmers, business and industry people must be backed by the most modern but appropriate science and technology. The Government must have a broad, committed approach to support these undertakings so that Vietnam can face these challenges and take advantage of new opportunities. With good governance of both the scientific community and the government, the goals of the workers and businesses can be realized, and then a modernized Vietnam can stand tall in the global community. Through globalization I consider there will be many hidden benefits, and our action to reap these benefits must follow accordingly:

(1) For survival and competitiveness, the Government must find ways, most likely through foreign assistance, to invest strongly and without delay in:

1. Educating and training farmers and the general labor force in modern science and technology (in particular, appropriate technologies,

agribusiness, farm management, information and communication technology).
2. Training technicians in all relevant fields to support the farming communities.
3. Reforming our agricultural cooperative laws to encourage the formation of agricultural cooperatives, gradually moving from single purpose to multiple purposes.
4. Strengthening investment in agricultural research, including:
    a. Introduction of new and appropriate crop varieties and animal breeds. GMOs and other biotechnological products are acceptable as long as they are developed with poor farmers in mind (e.g., tolerance to drought, submergence, adverse soil, insects and disease) and thoroughly tested for safety.
    b. Reductions in production costs
    c. Post-harvest technology
    d. Marketing and product development

(2) A new determination to fight corruption and graft to assure better channeling of development fund to the rural areas.

(3) A new determination to change economic policies to facilitate farmer's effort in meeting the challenges of globalization, including:

1. Lowering tariffs
2. Abolishing unreasonable fees to lower production costs
3. Abolishing double-standard treatments, meaning:
    a. Restructuring state-owned enterprises and state trading corporations
    b. Reduce state protection monopolies to the minimum
    c. Conformity with international commercial laws

If all of these reforms can be implemented, eventually the Vietnamese farming communities will enjoy better services, instead of suffering from the current internal marketing inefficiencies.

Will it be Feasible to Join the WTO?

While there are hostile protests by NGOs and other civic groups against the WTO, Vietnam sees joining the WTO as indispensable. Our conviction is based on the belief that the WTO will improve the transparency of its decision making process, as well as the mechanisms that will allow civil society and constructive NGOs to have their concerns taken into account. In the negotiations, small countries like Vietnam want "exception clauses" included in the agreements, to allow adequate transition time for our country to gradually open up our markets.

High-income countries, as well as the World Bank and IMF, can assist the low-income countries to improve efforts in rural development (e.g., infrastructure, education, health care). They can also assist by boosting research efforts to help lower production costs and increase yields, especially through biotechnology, and to increase crop varieties that have a tolerance for the factors previously mentioned. Above all, we firmly believe that world leaders, especially the World Bank, the IMF, and the foreign aid departments of industrialized countries may stick to their goals of promoting a world of equity, where hunger is eradicated, poverty is alleviated and the environment is protected. These goals cannot be realized if a few large corporations in industrialized countries are allowed to prosper at the expense of the small farmers and the inexperienced companies found in low-income countries. For the Vietnamese farmers and agribusinesses, first the government should create favorable policies to form strong links between the two. Then the science and technology community will assume an essential role in upgrading the technical capacity of each group with the optimum level of performance. These are the new conditions to secure a better life for the Vietnamese farming communities.