

The Park Place Economist

Volume 27 | Issue 1

Article 20

2019

Analyzing the Socialist Republic of Vietnam: The Country's Aspects of Growth

Heidi Luu Illinois Wesleyan University, tluu1@iwu.edu

Jake Morris
Illinois Wesleyan University, jmorris4@iwu.edu

Juliann Wang Illinois Wesleyan University

Connie Xu Illinois Wesleyan University, yxu@iwu.edu

Megan Zsorey Illinois Wesleyan University, mzsorey@iwu.edu

Follow this and additional works at: https://digitalcommons.iwu.edu/parkplace

Recommended Citation

Luu, Heidi; Morris, Jake; Wang, Juliann; Xu, Connie; and Zsorey, Megan (2019) "Analyzing the Socialist Republic of Vietnam: The Country's Aspects of Growth," *The Park Place Economist*: Vol. 27

Available at: https://digitalcommons.iwu.edu/parkplace/vol27/iss1/20

This Article is protected by copyright and/or related rights. It has been brought to you by Digital Commons @ IWU with permission from the rights-holder(s). You are free to use this material in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself. This material has been accepted for inclusion by editorial board of the Park Place Economist at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu. © Copyright is owned by the author of this document.

Analyzing the Socialist Republic of Vietnam: The Country's Aspects of Growth

Abstract

The Socialist Republic of Vietnam, also known as Vietnam, is a developing country in Southeast Asia. After French colonists left Vietnam, the 1954 Geneva Accords divided Vietnam into the Communist North and anti-Communist South. However, the country was reunited as a Communist state because of the North's victory in the Vietnam War in 1975, and the Communist Part of Vietnam has become the only official political party since then. The data of the World Bank in 2017 indicates that Vietnam is a lower middle-income country. Despite that, the country has had a substantial economic growth and development since the Đổi Mới economic reform initiated in 1986. The reform tried to transfer the country from a centrally-planned economy towards a market economy. Even though the economy is not completely free-market oriented, it has made great progress along the way, and the transition has changed Vietnam from one of the world's poorest countries to where it stands today.

Analyzing the Socialist Republic of Vietnam: The Country's Aspects of Growth

Heidi Luu, Jake Morris, Juliann Wang, Connie Xu, Megan Zsorey

The Socialist Republic of Vietnam, also known as Vietnam, is a developing country in Southeast Asia. After French colonists left Vietnam, the 1954 Geneva Accords divided Vietnam into the Communist North and anti-Communist South. However, the country was reunited as a Communist state because of the North's victory in the Vietnam War in 1975, and the Communist Party of Vietnam has become the only official political party since then. The data of the World Bank in 2017 indicates that Vietnam is a lower middle-income country. Despite that, the country has had a substantial economic growth and development since the Đổi Mới economic reform initiated in 1986. The reform tried to transfer the country from a centrally-planned economy towards a market economy. Even though the economy is not completely free-market oriented, it has made great progress along the way, and the transition has changed Vietnam from one of the world's poorest countries to where it stands today.

Overall, the country has enjoyed great economic growth in terms of some macro-variables, such as gross domestic product and gross national income per capita. Additionally, the human aspects of development are also fundamental for determining real progress in a country. More specifically, people in Vietnam have had an increase in quality of living, due to improvement in education, health, sanitation and poverty. Vietnam has opened its economy to the rest of the world through trade while maintaining protection over some domestic industries.

I. MACRO-VARIABLES AND OVERALL ECONOMIC DEVELOPMENT

Gross National Income (GNI) and gross domestic product (GDP) can both be used to track the economic development of a country over time. In 2016, 16.3% of Vietnam's GDP came from agriculture, 32.7% from industry, and 40.9% from services, adding up to \$552.059 billion in constant 2011 PPP international dollar. During the same year, Vietnam's GNI per capita totaled \$5,576 in constant 2011 PPP international dollars, which was a 4.6% increase compared to 2015.

Despite having a rather low number in GNI per capita, Vietnam has been able to enjoy relatively stable GNI growth ranging from 2.9% to 7.1% during the past 20 years. The average per capita GNI growth rate was also stable, about 4.540% between 2006 to 2016. Around 2008 and 2009, the world went through a financial crisis that had long-reaching impacts. In 2009, Vietnam's per capita GNI growth rate slowed to 2.866%.

The country-wide unemployment rate has been low and stable for the past 20 years since 1996; for example, 1.9% in 1996, 2.44%% in 2006, and 2.178% in 2016. However, people in rural areas of Vietnam, as well as the younger generation of 15 to 24-year-olds, are struggling with both unemployment and underemployment issues because of lack of quality jobs (Trotsenburg, 2013; O. T. Nguyen & T. M. T Nguyen, 2012). The government employed some policies to ease the problem, such as lending money to the unemployed, particularly the youth, at

low interest rates (Hoang, 2010), establishing career centers to help people find jobs, and encouraging exporting labor overseas (Government of Vietnam, 2013).

The annual inflation rate in terms of GDP deflator in 2016 was 1.11%. There was periodically high inflation in 2008 and 2010, e.g. 22.67% and 21.26%, respectively. The government employed "Resolution No. 11" in 2012 to lower the inflation rate by bringing down credit growth, budget and current account deficits, and increasing international reserves. It has maintained the single-digit inflation rates [since] 2012 (Kalra, 2015). The inflation rates from 2013 to 2016 stayed low and stable, and the averaged rate for these 4 years was 2.335%, which implies that the Vietnamese people experienced a 2.335% increase in prices of goods and costs of living from 2013 to 2016.

Vietnam had a high interest rate on deposits in 2016, which was 5.04%. This encouraged savings, which can be shown by the fact that the gross domestic savings increased by 70% in the last decade. The increased savings can fuel investments in the future on capital stocks, as one of the government's strategies to promote long-term economic growth.

II. HUMAN ASPECTS OF DEVELOPMENT

One of the most important indicators to measure the "human aspects" of development is the Human Development Index (HDI). The HDI value of Vietnam in 2015 was approximately 0.68. This number was relatively low and made Vietnam rank at 115 out of 188 countries and territories in the United Nations Human Development Reports. Vietnam's life expectancy at birth was 75.9 years in 2015, which was an increase from 73.2 in 2010. The expected years of schooling was 12.6 years in 2015, which means on average, students in Vietnam would finish half a

year of college. This number is good for a developing country, since it is higher than the developing countries' average of 11.8 years. Vietnam's mean years of schooling is much lower at only 8.0 years, which means that on average, adults at 25 years of age would not have finished middle school. Although having a strong value for life expectancy and expected years of schooling, the low values for mean years of schooling and GNI per capita (as discussed above) contribute to a modest HDI (United Nations Human Development Reports, 2017).

In terms of poverty, the GINI Index for Vietnam, in 2014, was 37.59%, which means that the income distribution in Vietnam is relatively even yet still has potential to be improved. Specifically, 29.06% of the country's income was held by the richest 10% population in the distribution. Only 2.56% was held by the poorest 10% population. The difference was 26.5%. The headcount ratio is another way to determine poverty. In 2014, 3.06% of Vietnam's population were below the poverty line, which means those in poverty had an expenditure below \$1.90 a day.

Life expectancy and infant mortality rate indicate the quality of life as well. Vietnam's total life expectancy at birth is 75.89 years in 2015, meaning Vietnamese people are living a relatively long life. The latest available data for infant mortality rate is 17.3 per 1,000 live births in 2015. Although the rate is very low, it has been improved over time due to increased public health, improved sanitation, access to clean water, and immunizations (The World Bank, 2016).

Vietnam has a population of 92,701,100 people as of 2016 and the population growth rate has decreased from 1996 (1.6%) to 2016 (0.9%) (The World Bank, 2017). This is due to the decreasing fertility rate caused by changing social attitudes and the two-child policy. Vietnam's total fertility rate is

currently 1.96 births per woman, which has been relatively stable and low due to the two-child policy since 2001. However, as of early 2017, the government is considering changing the two-child policy because of the declining population growth (Tomiyama, 2017).

Vietnam has made a good improvement regarding access to safe drinking water from 1990 to 2015. The percentage of the population with access to improved water sources increased from 62.7% in 1990 to 97.6% in 2015. At the end of 2015, almost everyone in Vietnam had access to clean water. From 1990 to 2015, the percentage of Vietnamese population with access to sanitation facilities increased from 36.2% to 78%.

Vietnam's literacy rate in 2009 was fairly high at above 90%. The primary school enrollment ratio (gross percentage) was at 108.88% as of 2015. Since the gross percentage takes into consideration all students enrolled in primary school (grades 1 to 5 for Vietnam) regardless of age, the above-100 percentages can be explained by early or late enrollment and the number of repeaters within the country. Unfortunately, data for secondary school enrollment is not available after 2000.

III. TRADE AND ECONOMIC GROWTH

Vietnam is a trade-dependent country. According to the Observatory of Economic Complexity (2017), ranking the 24th largest export economy in the world, Vietnam exports a large volume and wide range of products. The exports and imports as percentages of GDP in Vietnam overall have been increasing since 1996 and the percentage was more than 90% as of 2016. Manufactured goods comprised a large percentage of its exports, e.g. 76.3% in 2014, and the percentage of manufactured goods in exports has been grown rapidly from 1997 to 2014

(World Bank, 2017), which shows the great development in its manufacturing industries. In 2015, Vietnam exported more than imported and it had a positive trade balance of \$15.8 billion (OEC, 2017). The country's main export partners are the United States, China, Japan, and South Korea and its import partners are China, South Korea, Singapore, Japan, Hong Kong, Thailand (OEC, 2017).

Vietnam continuously experienced currency devaluation/depreciation during the past 20 years: from 11,033 VND/USD in 1996 to 21,935 VND/USD in 2016. The exchange rate has been stable due to the timely international reserve buildups and exchange rate policies (Kalra, 2015). Moreover, in 2015, Vietnam's net barter terms of trade index was 136.26% and it had grown by 36.26% from 2000. This high net barter terms of trade indicates that the price of exports was much higher than the price of imports, which is favorable for a developing country.

While seeking to drive up exports, Vietnam tries to maintain a highly protected domestic market by introducing the import restrictions, including product-specific import quotas, import licensing requirements and inflexible customs procedures (Martin, et al., n.d.).

Being very successful in attracting foreign investors, Vietnam gained a great amount of Foreign Direct Investment (FDI) inflows in the last two decades, due to the Đổi Mới economic reform and the low wage rates (Ni et. al, 2017). The majority of FDI is concentrated in manufacturing and real estate.

After introducing and explaining Vietnam's economic status and background, the later part of this paper will focus on two development initiatives/policies that have been implemented in Vietnam to address two critical problem: pollution management and land use rights.

IV. VIETNAM INDUSTRIAL POLLUTION MANAGEMENT PROJECT

1. Background Information

Vietnam's economy has experienced remarkable growth in the industrial sector during the last decade. According to the World Bank, the country's annual growth rate in industry averaged out to 3.74% from 2006-2011, and 7.29% from 2011 to 2016, and increased the total value of industry to nearly US\$ 56.8 billion in 2016 (constant 2010 US\$). However, along with growth comes pressing concerns about the environment, and in specific, water pollution. The World Bank (2012) noted that regulatory failures, which include policies focused on promoting industry without accounting for environmental consequences, as well as insufficient resources and funding, corruption, low penalties for violations of wastewater management, and limited public disclosure on industrial pollution, are the main reasons for poor compliance, ineffective enforcement and inadequate provision for wastewater treatment in industrial areas.

The 2010 report from the Vietnam Ministry of Natural Resources and Environment (MONRE) identified wastewater discharged from industrial establishments and industrial zones as the number-one factor putting tremendous pressure on the country's water environment. Specifically, around 70% of the daily industrial effluent in the country went untreated, and was released directly to receiving water system. The total untreated industrial discharge amounted to more than 1,000,000 m3 of wastewater per day. As a result, the water system is severely damaged, affecting not only major rivers and their aquatic ecosystems, but also economic resources, social unrest, and people's health (2010).

In the 2010 National State of Environmental Report, the MONRE estimated that the level of po-

llutants in major rivers in 2009 had exceeded the permitted level by 1.5 to 3 times. The measure used for the estimation was biochemical oxygen demand (BOD), which reflects the amount of dissolved oxygen consumed by microorganisms in the oxidation of substances in waters and wastes. High BOD levels in major rivers, especially in sections running through urban centers, industrial zones and mining areas, indicated that more dissolved oxygen was consumed during the oxidation of waste matters, and less of it was available to the aquatic ecosystem, leading to the serious depletion of dissolved oxygen and fish kills (Penn et al., 2009).

High content of pollutants in rivers are the direct cause of declining economic resources for fish farming and seafood cultivation. Take the environmental mishap in late 2008 from Vedan Vietnam, a monosodium glutamate producer, for example -- the company's untreated effluent discharge to Thi Vai River in Dong Nai Province was found to have polluted an 11-km stretch of the waterway (or 6.8 miles). At the time, analysis results from the Ho Chi Minh City National University's Institute for the Environment and Natural Resources indicated that 2,700 ha in seafood cultivation areas in Dong Nai and Ba Ria-Vung Tau provinces were heavily polluted (VietNam News, 2009). Eight years on from the incident, Thi Vai River has yet to fully recover, despite the US\$ 5.5 million compensation from Vedan Vietnam. Long Tho, once a thriving fishing village in Dong Nai Province with over 200 ha of fish-farming surface water from Thi Vai River before the pollution, now witnesses fish farmers losing income because their shrimp and oysters can no longer survive in the water (VietNamNet, 2016). More recently in May 2016, Tan Hieu Hung LLC, a company in Hoa Binh Province was found responsible for releasing untreated wastewater directly into Buoi River, leading to the mass deaths of 17 tonnes of capture fisheries owned by farmers in Thanh Hoa Province (MONRE Online, 2017).

In addition to inland rivers and surface water, the marine environment in Vietnam has also been severely harmed by the coastal industrial zones and economic areas, which make up 79% of industrial zones in the whole country (The MONRE, 2010). In April 2016, an estimated 70 tonnes of dead fish were found washed ashore along more than 200 km (125 miles) of Vietnam's central coastline (The Guardian, 2016). The cause behind this environmental disaster was identified to be wastewater containing toxins such as cyanide and carbolic acids that had been released directly into the sea during a test run of Formosa Ha Tinh Steel Corporation, a subsidiary of Taiwan's Formosa Plastics Group. The company pledged US\$ 500 million in clean-up and compensation after the government's jurisdiction. However, with marine creatures and coastal estuaries damaged by harmful toxins, fisheries' production and tourism have been bearing the negative effects. The Formosa steel plant mishap also stirred up anger and unrest among Vietnamese living in the country and abroad. Outraged by the government being discreet about the incident and Formosa not taking a stance to address the consequences early enough, people have demonstrated, rallied, and organized protests on the coast, in front of the steel plant, and in some major cities (Ives, 2016).

Along with clear economic costs and social issues are the health implications caused by water pollution due to poor industrial wastewater treatment, a study in 2010 found that industrial effluent led to high levels of heavy-metal contamination in wastewater-irrigated farming soil and vegetables. In specific, soil and vegetable samples in suburban Hanoi that are irrigated by the industrial waste-laden ri-

vers of To Lich and Kim Nguu were found to have heavy-metal concentrations exceeding that of the background levels and Vietnam's permitted standards, regardless of their varied distances from the canals (Nguyen et al., 2010). There is a strong likelihood that agricultural soil and vegetables surrounding other industrial areas face the same situation. In addition, the MONRE estimated that every year, there are about 9,000 deaths and 200,000 diagnosed cases of cancer that are attributable to usage of polluted water in Vietnam (MONRE Online, 2017).

Therefore, based on the above reasons, it is perceivable that industrial wastewater treatment is an extremely urgent issue for Vietnam. To promote growth in the industrial sector, Vietnam had allowed poor management of natural resources and continued environmental degradation to happen. Without timely efforts to mitigate the consequences, this trade-off would eventually backfire and threaten the sustainability of the country's economic growth.

2. Vietnam Industrial Pollution Management Project

Recognizing the dire need for a remedy to Vietnam's environmental problems regarding industrial wastewater treatment, the World Bank approved the Vietnam Industrial Pollution Management Project on October 25, 2012. This is a 5.5-year long project, starting on March 25, 2013 and closing on September 30, 2018. The project's objective is to improve compliance with industrial wastewater treatment regulations in four of the most industrialized provinces in Vietnam: Nam Dinh, Ha Nam, Dong Nai and Ba Ria-Vung Tau, covering two major river basins - Cau River basin and Nhue-Day River basin (The World Bank, 2012).

The above objective was to be fulfilled by satisfying the following three components: (1) Environmental Policy, Monitoring and Enforcement; (2)

Performance-based Centralized Effluent Treatment Plants (CETPs) financing; and (3) Implementation Support. The first component comprises three sub--elements: (a) Policy Review and Revision; (b) Environmental Monitoring and Enforcement; and (c) Information Disclosure and Public Participation. The second component provides performance-based loans to finance the construction of new CETPs, the expansion of existing CETPs, and the improvement of other relevant infrastructure of industrial wastewater management in the industrial zones of the project provinces. The last component supports project beneficiaries to properly implement project activities through three sub-elements: (a) capacity building; (b) technical assistance (TA); and (c) project management (The World Bank, 2012).

The project's funding, which amounts to US\$ 50 million in commitment costs, comes from the World Bank's International Development Association (IDA), the concessional lending window for low-income countries. The total cost, which also includes funding from non-bank sources, is US\$ 58.85 million. The project's primary executing agency is the Vietnam Ministry of Planning and Investment (MPI). It is supported by a project steering committee (PSC), three project management units (PMUs), and four project focal points, each at one of the provinces concerned. Supporting committees and units mostly comprise personnel from the MPI, the MONRE, the Ministry of Finance (MOF), the Vietnam Environment Protection Fund (VEPF), and the Vietnam Environment Administration (VEA). The project also involves significant coordination between the said implementing agencies and the Departments of Planning and Investment, Departments of Natural Resources and Environment, Industrial Zone Management Boards, CETP investors, and the Environment Police in the four participating provinces (The World Bank, 2012).

3. Analyzing the Results of the Vietnam Industrial Pollution Management Project

The project's results are assessed and analyzed by the World Bank based on a framework consisting of a series of performance indicators: two project development objective (PDO) level results indicators to evaluate the fulfillment of the main project objective as a whole, four intermediate results indicators for component (1), two for component (2), and three for component (3), which will be discussed in details down below. Most of the indicators have a target for the end of each year, over a total of 5 years; and most must be assessed on a semi-annual basis (The World Bank, 2012).

The World Bank's Implementation Status & Results Report on the second half of 2016's performance, which was released on March 17, 2017, is the most recent one out of the sequence of nine disclosed reports. Overall, the project implementation is determined to have improved since the previous review period. The document also noted that "the project implementation has shifted more to actual monitoring and enforcement activities in the four existing province." In specific, for the second half of 2016, the four provinces have stepped up enforcement by implementing intensive monitoring of industrial wastewater discharge (The World Bank, 2017).

The first two PDO level results indicators, which looked at the number of financed industrial zones (IZs) and the percentage of the other 34 non-financed operating IZs in compliance with effluent discharge standards in the four provinces, were on par with the period's target. With four financed IZs, the project met its end goal of having at least one financed IZ from each project province, and was hoping to have reached eight by the end of September,

2018. However, two of the four financed IZs, the Bao Minh IZ in Nam Dinh and the Hoa Mac IZ in Ha Nam showed non-compliance with the national standards in July through December 2016. The MONRE had been requested to follow up on the actions to address non-compliance. The percentage of the other 34 non-financed operating IZs in compliance with effluent discharge standards was 32%, which surpassed Year 4's target of 30%. However, this showed a decline from 50% in the previous period. This decline reflected the fact that monitoring had been limited and carried out with advance notice in the previous period, in contrast to the monthly monitoring in the second half of 2016. Monitoring results showed that, however, only Dong Nai Province had a decent percentage of compliance at 46%, while Nam Dinh, Ha Nam, and Ba Ria-Vung Tau indicated a non-compliance in all six monitoring events. Thus, a degradation of the CETP effluents was implied and special attention to improve CETP effluent compliance had to be addressed.

The next four indicators detailing the first component - Improved Regulatory, Environmental Monitoring and Enforcement - were generally falling behind as compared to Year 4's target. Only two out of the seven targeted key legal documents were reviewed, revised or adopted. The percentage of operating IZs under proper wastewater monitoring was 46%, which was just a little short of Year 4's target of 50% and the end goal of 100%. The two worst-performing indicators in the first project component were the percentage of IZs rated for environmental performance, which was 0% compared to Year 4's target of 50% and the end goal of 100%, and the number of Automated Monitoring Stations (AMSs) established and functioning, which was also zero compared to Year 4's target and end goal of 17. All of the above indicators showed no improvement from the previous review period. Unsatisfactory performance with regards to the third indicator was attributed to the delayed development of the Rating Methodology and the Manual for Implementing Environmental Performance Rating by the VEA, and the Implementation Plan by the project provinces, which should have been completed within the first few phases of the project. No explanation was provided as to why the last indicator failed to reach its target. However, the construction of 15 out of 17 planned AMS's is expected to be completed by October 2017 with their subsequent operation.

The next two indicators pertaining to the second component - Performance-Based CETP Financing - also failed to meet their goals and targets. The number of CETP financing proposals received was two, which was short of eight proposals planned for Year 4, and a decrease from four proposals received in the previous period. The number of quality CETPs constructed and completed/operations was four, which was the same as the previous period and short of eight CEPTs planned for Year 4.

The last component of the project - Implementation Support - is evaluated based on three indicators. The first one is the percentage of trainees with improved capacity after project-financed training events, which kept at 80%, same as from the previous period and lacked 10% as compared to Year 4's target. The second indicator, detailing the number of technical assistance packages on sustainable industrial development and pollution baseline investigation completed, noted that investigation reports of the seven packages were to be finalized and disseminated by Year 4. However, in 2016, only two of the packages were completed. The outlook was positive for the last indicator - the number of participants trained in project-financed capacity building activities. On February 6, 2017, the number was 2,172, above Year 4's target of 2,000 and only 13% short of the end goal for September, 2018 (The World Bank, 2017).

Based on the above analysis, it is verifiable that the overall project implementation in the second half of 2016 improved in terms of fulfilling the whole project's objective, and monitoring activities had become more intensive and effective. However, most of the intermediate results indicators were either falling behind target or showed no improvements from the previous review period. These shortcomings may provide an insight on certain drawbacks with regards to the design and implementation of the project, which will be discussed in the next part.

4. A Deeper Insight Into Vietnam's Industrial Pollution Management Project

The project is covering two river basins: Nhue Day and Dong Nai River Basins. After the operation of the project, the water quality of Nhue Day River and Dong Nai River Basin has been improved, as well as their aquatic ecosystems and landscape of the river. By eliminating untreated industrial wastewater, the risk of potential and adverse impacts on environmental and human health of people live close the rivers can be reduced.

In order to operate the project more effectively, the government has revised regulations, and the World Bank has trained employees and people who are involved in operation, which will benefit the sustainability of industrial growth project areas and increase knowledge on wastewater treatment procedures (World Bank, 2017). The whole project is composed of three units in each province - a construction unit, an operation unit and a monitoring unit. All three units are hiring labor from Vietnam. The project is creating more job opportunities, especially during the construction phase where many tanks and new drainage systems need to be built. As

the demand of labor increased, wages are going to increase (World Bank, 2017). The monitoring unit requires building 17 monitoring stations in each province, which will take up a lot of land. Since all the monitoring stations are built on public owned land, there will not be land acquisition or resettlement needed, which will save expenses and problems (World Bank, 2012).

Along with the advantages, the disadvantages of this project still exist. While installing this project in Vietnam, there are personnel from governmental bodies involved, which might obstruct the progress of the project. Corruption is pervasive in Vietnam, and Vietnam scores poorly when it comes to government transparency and reporting requirements. The government is likely to politically interfere by receiving bribes (Anti-corruption Portal, 2017). In 2015, the Vietnamese government relaxed the rule of industrial wastewater discharging, which increased the difficulties of implementing the project (Tuoi Tre News, 2016).

As mentioned above, the project is creating job opportunities for local residents, but there is a potential side-effect. The construction of the project will attract labor force outside the project area. Once the construction is done, if the government and organizations cannot properly handle the re-employment issue of labor force gathered from outside the local area, this will lead to adverse impacts on society and public order, as well as the labor force market in local areas. Since the project involved new technology and equipment and most local labor are untrained, the project was less effective in the first phase due to the lack of trained employees (World Bank, 2017).

The disadvantages are temporary, and can be remedied by coordinating with the local authorities better, as well as only recruiting people from local areas and focusing more on training personnel in the preliminary phases. The advantages, on the other hand, will bring long-lasting benefits to the whole society, thus we believe the benefits exceeded the costs. The project is worthwhile to be implemented (World Bank, 2017).

The unintended consequences the project brought are from different aspects. Since the project is working well, and its results has reached the expectations, air quality in Ha Nam province improved (World Bank, 2017). In the past, wastewater was discharged directly into rivers without any treatment, and thus created odors and polluted the air in the area nearby. Once the wastewater was treated, the air pollution was also controlled.

Another unintended consequence relating to odor is on the flip-side. During the construction phase, cement, clay and other building materials are used, strange odor and noise are released and bother residents nearby (World Bank, 2017). Moreover, when constructing the project, there will be waste. Since the project needs to have many workers working together, there will be tons of domestic wastewater of workers. The domestic wastewater has the potential risk of polluting the groundwater of the project area. There will also be materials wasted. The materials will include building materials, oil, and gas. This will create garbage and also pollute the project area (World Bank, 2017). Lastly, since the project areas are all industrial zones, the implementation of the project will increase companies' costs due to the training of more workers and maintenance of more costly wastewater treatment. Thus will lag the growth rate of industry in the project areas, giving other emerging industrial zones a chance to catch up.

V. THE 2013 LAND LAW & LAND CONVERSION

1. Background Information

In a country growing as fast as Vietnam, there is pressure to convert agricultural land to land used for commercial purposes with subsequent positive and negative consequences. The Vietnamese government has the right to manage or allocate all the land in the country, although, technically, the people own all the land. The state grants Land Use Right Certificates (LURCs) to farmers, however, the state can legally redistribute land, often at the expense of poor farmers. These land requisitions take place for a variety of public and private reasons, and are causing strife among the rural farmers that are displaces and sometimes not consulted or compensated. Due to Vietnam's lower middle-income level, there is high demand to use agricultural and forest land for economic development purposes (Dang et al., 2016). The exact urgency of these development projects and subsequent displacement of farmers is highly debatable, but the Vietnamese government would contend that these are urgent issues. Due to this, there has been unequal development in favor of urban expansion and modernization and against agriculture (Dang et al., 2016).

On the other hand, agribusiness expansion is another area that is changing land-use in Vietnam, specifically in rural areas surrounding major cities (Dang et al., 2016). Again, these land requisitions are angering farmers who feel cheated and often don't find sufficient farmland elsewhere (Dang et al., 2016). However, according to the state, "[t]he project is deemed essential to the local economy and in the national interest for food security," and repossessed the land "on the basis that it was not being used 'economically efficiently'" (Dang et al., 2016). Needless to say, land rights are a huge concern in Vietnam right now, involving a wide range of stakeholders. The government is inevitably involved as well as farmers and public and private interests,

domestic and foreign (Dang et al., 2016). These are ongoing issues directly related to the Land Law in Vietnam, and there have been many development projects that have resulted in agricultural land being used for commercial/industrial development. This is not surprising as Vietnam is investing a lot of money in infrastructure compared to other countries in Southeast Asia (Dang et al., 2016).

One such project in a suburb of Hanoi began in 2012 and is an ongoing project, which involved the conversion of 50 ha for a "luxury residential development" (Dang et al., 2016). This specific project impacted over 4,000 farming families who completely lost their land and livelihoods without consultation or compensation (Dang et al., 2016). This huge development project was to create a large residential zone with luxuries like a golf course and is estimated to cost about 8.2 billion USD (Dang et al., 2016). This project in northern Vietnam has created severe conflicts between farmers and economic elites who benefit from infrastructure projects.

2. A Deeper Insight into The Land Law of 2013 and Land Conversion

The Vietnamese government is trying to address the inefficiencies of the Land Law of 2003. For example, foreign and domestic investors now must follow the same provisions for leasing land. The government is also establishing stricter requirements for developers to ensure that the investments will be well maintained and profitable. Additionally, the government is also trying to end the uncertainty over land prices by establishing the rule that land prices must be determined on a case-by-case basis by the People's Committee. The government is also trying to make land withdrawal a more regulated process. In doing so, the government is now requiring that land withdrawal may only be for significant projects and that it must be approved by the People's Council.

These changes to the Land Law demonstrate a couple of things. First, the government is trying to provide more liberal provisions for land transfer. On the other hand, the government is also implementing stricter requirements on land withdrawal and pricing (Nguyen, 2014). In particular, land withdrawal policies may not be strict enough, leaving many farmers landless. Though people can have their own land in Vietnam, the State is actually the owner, and it therefore makes final decisions regarding the use of land (Vietnam Law in English, 2013). Indeed, the concept of privatized land ownership, like what is common in the United States, does not really exist in Vietnam. This has had positive and negative effects, and there are clearly winners and losers due to this conceptualization of land ownership. Additionally, there are certain advantages and disadvantages to the updated Land Law of 2013.

Pressure to develop quadrupled the land attributed to urban areas over a span of only eight years from 1995 to 2003 (Nguyen & Tran et al., 2016). Though there are positives to this, and those positives will be explained, this trend has increased conflict between maintaining agricultural land to ensure the food security and urbanization, as well as job development (Nguyen & Tran et al., 2016). The government has forced farmers off their lands in order to develop, and the problem is that it often does not provide adequate, or even any, compensation for farmers and their families. The government has improved in expanding benefits but only marginally so. There is not much motivation for the government to compensate them well (Nguyen & Tran et al., 2016).

The anger and resentment from farmers due to land conversion practices has been violent at times. This has been both a disadvantage and unintended consequence of land conversion practices and the inflexible State ownership of land. On April 15, 2017,

a group of farmers in a Hanoi suburb held twelve police officers hostage over a land dispute. At the time, the local government was trying to give the land to Viettel, which is Vietnam's largest telecom firm (Allen-Ebrahimian, 2017). Though this kind of violent outburst is rare, especially because the consequences for doing so are so incredibly high in Vietnam, these occurrences have been happening more frequently as people are frustrated and angry over land conversion practices. For example, in 2012, 70% of government-related complaints were about land disputes (Allen-Ebrahimian, 2017).

Land conversion is necessary for development, but it is clear that the government needs to review its practices in order to maintain peace and prosperity for all people. It should be noted that land conversion practices have been good for Vietnam too. For example, through Vietnam's policies, corporations profit greatly from their deals with the government, so this is helping incentivize corporations to invest in Vietnam. Additionally, the government makes significant gains as well through leasing the buildings that are eventually built by developers (Nguyen & Tran et al., 2016). Revenue for the government means that it can invest in more infrastructure and social services for the people. The negatives of land conversion are one of the unfortunate costs of development that the government needs to do a better job of addressing.

Though the Land Law of 2013 has not addressed some fundamental problems in terms of compensation for farmers, it has addressed other significant issues regarding land use. The process of crafting the Land Law was far more open than in the past; many different people, including civil society advocates; farmers; and the media, were heavily involved in the process (however, the government did not take all their considerations into account). Additionally, the Land Law should be looked at positively because it

has sought to significantly decrease corruption. This has been done through discouraging local speculation and corruption by reorganizing authority to the provincial and national levels. Additionally, business analysts are satisfied with the equal treatment of foreign and domestic investors because this is viewed as a positive signal that will continue to drive foreign direct investment. The clarification of the land tax system has also added to government revenue. Finally, the Land Law of 2013 is more efficient in that it has shifted the main authorized body in land use planning from the commune to the district. This has been effective because it enables more centralized control (Dang et al., 2016). Indeed, despite the problems with land conversion practices that do persist, the government has clearly attempted to address inadequacies.

VI. CONCLUSION

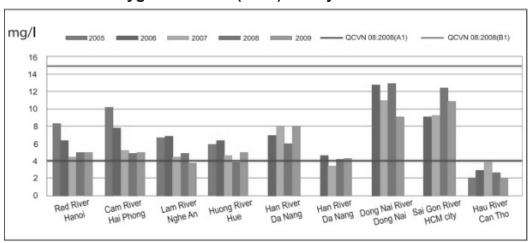
Since Đổi Mới, Vietnam has transformed from a rural, largely agriculture-based economy to an increasingly industrial and open economy. However, development has not come without challenges. One of the biggest challenges that Vietnam has had to overcome is wastewater mismanagement. Additionally, the government has tried to address the inefficiencies of previous land laws through Land Law of 2003 and the updated Land Law of 2013, yet not all major problems have been solved, given the controversy over land conversion and its effects on farmers. Specifically, the authority of government potentially weakened the bargaining power of farmers. Like many developing nations, the government of Vietnam will need to keep innovating solutions to problems in order to address both the economic and human aspects of development.

APPENDIX

Annual Growth in Vietnam's Industry Sector

Industry, value added (annual % growth)						
2006	2007	2008	2009	2010	2011	Average
7.29	7.36	4.13	5.98	-9.92	7.60	3.74
2011	2012	2013	2014	2015	2016	Average
7.60	7.39	5.08	6.42	9.64	7.57	7.29

Biochemical Oxygen Demand (BOD) in Major Rivers in Vietnam



Variation of annual average BOD₅ content in major rivers in the 2005 - 2009 period

Source: CEM/VEA, 2010; Tien Giang and Can Tho DONRE

REFERENCES

- Allen-Ebrahimian, B. (2017, Apr. 17). This Village in Vietnam is Holding a Dozen Police Officers Hostage. Foreign Policy. Retrieved from http://foreignpolicy.com/2017/04/17/this-village-in-vietnam-is-holding-adozen-police-officers-hostage/
- Dang, A., Pham, Q., Burke, A. (2016). Conversion of Land Use in Vietnam through a Political Economy Lens. Journal of Social Science and Humanities. (2)2, 131-146. Retrieved from http://www.opml.co.uk/sites/default/files/Conversion-of-Land-Use-in-Vietnam-through-a-Political-Economy-Lens.pdf
- GAN Business Anti-corruption Portal. (2017, Sept.). Vietnam Corruption Report. Retrieved from http://www.business-anti-corruption.com/country-profiles/vietnam
- Government of Vietnam (2013, July 06). Chính sách việc làm: Thực trạng và giải pháp. Retrieved from http://vnclp.gov.vn/ct/cms/tintuc/Lists/chinhsach/View_Detail.aspx?ItemID=178
- Hoang, H. M. (2010, March). Unemployment and Unemployment Support Policy with Protecting Human Right Issues in Vietnam Today. Social Sciences Information Review, 4(1), 40-46.
- Ives, M. (October 3, 2016). Outrage Over Fish Kill in Vietnam Simmers 6 Months Later. The New York Times.

 Retrieved from https://www.nytimes.com/2016/10/04/world/asia/formosa-vietnam-fish.html
- Kalra, S. (2015, April). Vietnam: The Global Economy and Macroeconomic Outlook. Journal of Southeast Asian Economies, 32(1), 11-25
- Martin, K., Rajapatirana, S., Athokorala, P. (n.d.). Vietnam:
 Deepening Reforms for Rapid Export Growth. Retrieved
 from http://siteresources.worldbank.org/INTRANETTRADE/Resources/WBI-Training/vietexports_mAtin.
 pdf
- MONRE Online (June 6, 2017). Vi phạm xả thải nước thải công nghiệp: Nhiều doanh nghiệp còn "nhờn" luật. Retrieved from http://www.baotainguyenmoitruong. vn/moi-truong-va-phat-trien/201706/vi-pham-xa-thai-nuoc-thai-cong-nghiep-nhieu-doanh-nghiep-con-nhon-luat-2814743/index.htm
- Nguyen, V. (2014, Aug. 26). Vietnam's New Land Law: The Impact on Foreign Developers. Tilleke & Gibbins. Retrieved from http://www.tilleke.com/sites/default/files/2014 Aug Vietnam New Land Law.pdf
- Nguyen, H. T. L., Ohtsubo, M., Li, L., Higashi, T., and Kanayama, M. (2010). Heavy-Metal Contamination of Soil and Vegetables in Wastewater-Irrigated Agricultural Soil in a Suburban Area of Hanoi, Vietnam. Communications in

- Soil Science & Plant Analysis, 41(4), 390-407.
- Nguyen, T., Tran, T., Bui, T., Man, H., Walter, T. (2016, Mar. 31). Socio-Economic Effects of Agricultural Land Conversion for Urban Development: Case Study of Hanoi, Vietnam. Elsevier. Retrieved from http://www.sciencedirect.com/science/article/pii/S0264837716301764
- Nguyen, O. T., & Nguyen, T. M. T. (2012, August). An overview of unemployment and time-related underemployment in Vietnam. The ILO Social Protection Resources. Retrieved from www.social-protection.org/
- Ni, B., Spatareanu, M., Manole, V., Otsuki, T., & Yamada, H. (2017). The origin of FDI and domestic firms' productivity—Evidence from Vietnam. Journal Of Asian Economics, 5256-76.
- Penn, M. R., Pauer, J. J., and Mihelcic, J. R. (2009). Biochemical Oxygen Demand. Environmental And Ecological Chemistry, 2, 278-281.
- The Guardian (July 1, 2016). Vietnam Blames Toxic Wastewater From Steel Plant For Mass Fish Deaths. Retrieved from https://www.theguardian.com/environment/2016/jul/01/vietnam-blames-toxic-waste-water-fom-steel-plant-for-mass-fish-deaths
- The Ministry of Natural Resources and Environment (2010). 2010 National State of Environmental Report An overview of Vietnam's environment. Retrieved from http://cem.gov.vn/VN/BAOCAO_Content/tabid/356/cat/177/nfriend/3741667/language/vi-VN/Default.aspx
- The Observatory of Economic Complexity (OEC). (2017). Vietnam. Retrieved from https://atlas.media.mit.edu/en/profile/country/vnm/
- The World Bank. (September 25, 2012). Project Appraisal Document On A Proposed Credit In The Amount Of SDR 32.9 Million (US\$ 50.0 Million Equivalent) To The Socialist Republic Of Vietnam For The Industrial Pollution Management Project. Retrieved from http://documents.worldbank.org/curated/en/189991468320929855/pd-f/698880PAD0P1130Official0Use0Only090.pdf
- The World Bank. Vietnam Industrial Pollution Management Project- Implementation Status & Results Report. Retrieved from http://documents.worldbank.org/curated/en/951081489775247076/pdf/ISR-Disclosable -P113151-03-17-2017-1489778846820.pdf
- The World Bank (n.d.). World Development Indicators. Retrieved from http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators
- Tomiyama, A. (2017, January 17). Vietnam's declining birth rate spells end of two-child policy. Nikkei. Retrieved October 1, 2017, from https://asia.nikkei.com

Luu, Morris, Wang, Xu, Zsorey

- Trotsenburg, A. V. (2013, May 10). Vietnam Needs More High Quality Jobs. Viet Nam News. Retrieved from http://www.worldbank.org/en/news/opinion/2013/05/10/vietnam-needs-more-high-quality-jobs
- Tuoi Tre News. (2016, December 6). In Vietnam, High-pollution Industries Enjoy Relaxed Environmental Standards. Retrieved from https://tuoitrenews.vn/business/38381/in-vietnam-highpollution-industries-enjoy-relaxed-environmental-standards
- United Nations Development Program (2017). Human Development Reports. Retrieved from http://hdr.undp.org/en/composite/HDI
- Vietnam Law in English. (2013, Nov. 29). Vietnam Land Law 2013- LAW NO. 45/2013/QH13.
- Vietnam Law in English. Retrieved from http://vietnam-lawenglish.blogspot.com/2013/11/vietnam-land-law-2013-law-no-452013qh13.html
- VietNam News (December 15, 2009). Vedan admits to polluting parts of Thi Vai River. Retrieved from http://vietnamnews.vn/environment/194958/vedan-admits-to-polluting-parts-of-thi-vai-river.html#3Mcg1t1xz3L0p3CE.97
- VietNamNet (July 19, 2016). People struggle on eight years after Vedan pollution. Retrieved from http://english. vietnamnet.vn/fms/environment/160702/people-struggle-on-eight-years-after-vedan-pollution.html
- World Bank. (2017, May). Environmental Management Plan Of Subproject "Construct Centralized Effluent Treatment Plant With Capacity 2,000m3 /Day At Dong Van III, Ha Nam Province- Phase 1."