Improving Canadian International Development Agency’s (CIDA) Aid Effectiveness Agenda in Vietnam by Targeting the Mekong Delta

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Executive Summary:
Keeping in mind Canada’s 2009 Aid Effectiveness Agenda and history of giving to Vietnam ($660 million since the 1950s), this policy paper recommends that in order to produce long-term and effective aid to Vietnam, Canada would be better served by transitioning some of its current development programs towards the Mekong Delta. As of 2010, the Mekong Delta produced fifty percent of the food volume and 61 percent of the national export value in Vietnam; however, the Mekong River’s existing quality and quantity is consistently diminishing due to recent challenges wrought by damming, modernized farming techniques, and climate change. Research, adaptation and development aid targeted at the changing conditions of the Mekong River will be essential to Vietnam’s food security and long term economic growth. This working paper identifies six current or recently completed projects that CIDA has applied in Vietnam which can be, or are, related to the Mekong Delta and recommends ways that they can be improved to more specifically address the recent environmental and anthropogenic threats in the region.
Policy Brief

**Goal:** Increase long-term food security and economic growth in Vietnam by focusing on the Mekong River Delta.

**Significance of the Issue:**
1. Currently the Mekong Delta has approximately 18 million inhabitants who reflect 23 percent of Vietnam’s total population. 84.5 percent of those inhabitants live in rural areas which have been relatively unaffected by the economic advancements of Vietnam over the past decades.
2. Economically speaking, the Delta is a significant producer of export and domestic goods for Vietnam. The Delta produces about half of the national food volume and 61 percent of the country’s national export value including: 51 percent of total rice-paddy production, 55 percent of national fisheries and fruit production, and 60 percent of the country’s aquacultural goods.
3. Dam construction, agricultural modernization, climate change and Chinese development of the Mekong reveals a dilemma for Vietnam in terms of how it will balance economic growth (both domestically and in the region) with long-term sustainability and food security.
4. As the economic demand for water has increased along the Mekong River, the water flows have already been reduced in terms of both quality and quantity in the Mekong Delta and this pattern will only increase in the coming decades.

**Canada’s Interest in the Issue:**
1. Since 1990, Canada has provided approximately $660 million in development assistance through the Canadian International Development Agency (CIDA) in support of Vietnam’s economic reform and poverty alleviation initiatives.
2. Vietnam is currently Canada’s only “country in focus” in the lower Mekong Basin and will be the most affected by development of the Mekong River.
3. Canada currently has several development projects that are improving lives in Vietnam, but only a few of those target development along the Mekong specifically. The growing and largely unanticipated socio-economic threats to the Mekong Delta have the potential in the not-so-distant future to erode present development successes in Vietnam by crippling one of its most productive regions.

**Policy Recommendations:**

**Primary:**
1. Redirecting efforts in Vietnam toward the Mekong Delta.
2. Developing a model for sustainable development that could be applied to other river basins.

**Secondary:**
1. Incorporate adaption practices that will help farmers deal with future water shortages including: water-saving farming techniques, crop rotations, and retraining.
2. Avoid modernized farming techniques that, although they are used to increase crop yields, also increase water use and are shown to negatively affect smaller rural farmers.
3. Provide support in the form of both information gathering and dissemination on the expected and current changes in the Mekong Delta. This includes helping Vietnam establish risk assessments on the effects of upriver dams for the Mekong Commission.
4. Help Vietnam improve its current river monitoring system to warn of flooding, surface water quality and ground water quality.

**Global Implications:**
40 percent of the world’s population lives in the approximately 214 international river basins that cover almost half of the global land area. Successful and sustainable development in the Mekong could be useful in creating a model for addressing the coming challenges with regards to inter-state water basins globally.
One of the greatest development challenges facing Southeast Asian states along the Mekong Basin is balancing protection of the Mekong River as a valuable natural resource while promoting mutually sustainable economic growth among the states that share this resource. Canada’s current interest in the Mekong River Basin is through its bilateral aid programs with Vietnam – the country that faces the greatest food security threats and economic losses from upstream development of the Mekong River. The question asked by this policy paper is how can Canada help Vietnam to adapt and potentially benefit from the development challenges that will occur along its Mekong River Delta? The following policy paper is structured to provide an answer to the posed question through three sections that discuss the problem, examine Canada’s interest in the issue, and provide policy recommendations based on new information.

In the final section of the working paper, this analysis recognizes and provides suggestions for a few of CIDA’s programs which are, or can be, targeted toward the Mekong Delta, including: the Tra Vinh Improved Livelihood Project, The Soc Trang Herd and Crop Quality Improvement Project, the Knowledge Building and Policy Dialogue Initiative, the Good Governance and Aid Effectiveness Initiative in Vietnam (Phase 1), Support Program to Respond to Climate Change in Vietnam and CIDA’s partnership with the Red Cross to address flooding. The proposed recommendations to the existing or recently completed projects are determined predominantly around two concerns: first, the priorities identified in Vietnam’s Five-Year Socio-Economic Development Plan; and second, the findings outlined in the early sections of this paper which include information concerning both what is currently known, and what is predicted, in regards to threats to Vietnam’s Mekong River Delta.1 As a central theme, there is an

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1 There are significant limitations associated with this analysis in terms of recommendations, as practical application is often far removed from academic analysis. The recommendation section of the working paper is meant to be suggestive of potential and not a substitute for current projects, as it does not engage with all of the likely bi-lateral nuances associated with CIDA’s projects in Vietnam.
understanding that until recently, the Mekong Delta in Vietnam has not been seen as a developmental aid priority; however, rapid environmental and anthropogenic changes in the region have created an impetus for CIDA to re-evaluate its current development projects in order to achieve the long-term priorities of food security and sustainable economic development in Vietnam.

Statement of the Problem

Importance of the Mekong Delta and Lower Mekong Basin

The Mekong Delta\(^2\) refers to a geostrategic area in Vietnam where the waters of the Mekong River\(^3\) “are present everywhere and in all aspects of life, serving transportation, communication, fishing, agriculture, aquaculture needs and all kinds of daily domestic uses” (Kakonen 2008). Currently the Mekong Delta has approximately 18 million inhabitants who reflect 23 percent of Vietnam’s total population. 84.5 percent of those inhabitants live in rural areas which have been relatively unaffected by the economic advancements of Vietnam over the past decades (Kakonen 2008). Economically speaking, the Delta is a significant producer of export and domestic goods for Vietnam. Agricultural land accounts for 75 percent of the area and rice cultivation is the primary livelihood for 60 percent of the people.\(^4\) In addition, the Delta produces about half of the national food volume and 61 percent of the country’s national export value including: 51 percent of total rice-paddy production, 55 percent of national fisheries and fruit production, and 60 percent of the country’s aquacultural goods (Kakonen 2008). The effectiveness of production in the Mekong Delta is due in large part to the tropical monsoon climate that produces wet and dry seasons with relatively warm weather all year-round. The

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\(^2\) The Mekong River Delta refers to the point where the Mekong River meets the South China Sea in Vietnam. The Mekong River Delta is not to be confused with the Lower Mekong River Basin, which refers to the River and the land area south of China and Burma.

\(^3\) The Vietnamese refer to the River as Cuu Long Giang or the River of the Nine Dragons (Elhance 1999, 194).

\(^4\) Vietnam is the second largest exporter of rice in the world. The historically forested and marshy land of the Mekong Delta in Vietnam is now a place with highly productive rice paddies, fisheries and agricultural production that are dependent on the consistent flows of the Mekong River.
flow of the Mekong can vary from 50,000 m³/s during the wet months of August to September to 2,250 m³/s during the dry months of April to May, and during the wet season torrential rains typically result in large-scale flooding along the entire reach of the Mekong, with extensive “over-bank flows in...Vietnam” that play a large role in rice cultivation and keeping out saltwater intrusion (Browder and Ortolano 2000, 502).

While the focus of this policy paper is on the Mekong Delta in Vietnam, it is important to note that the Delta exists within and is dependent on the larger ecosystem known as the Mekong River Basin. The Mekong River flows nearly 4,200 kilometers in total and its headwaters originate in the Himalayan mountain ranges in Tibet where it is referred to as Water of the Rocks (Elhance 1999, 192). The River flows from Tibet through the southern Yunnan province of China to Burma, Laos, Thailand, Cambodia and finally reaching the sea through the delta in Vietnam (Elhance 1999, 192). While the headwaters of the Mekong belong to the two upper riparian countries of China and Burma, these countries account for less than one quarter of the total water flow, with only three percent of the Basin area in Burma and only 12-18 percent of the total water flow coming from China. The Lower Mekong Basin (LMB), on the other hand, is home to approximately 65 million people who live in the four countries of Laos, Thailand, Cambodia, and Vietnam.⁵

Putting an exact economic value of the Mekong River for the LMB riparian states is difficult since reliable cross-border statistics are challenging to procure (Torell and Ahmed 2001, 5), but what is known is that the LMB reflects an ethnically diverse group of people who rely on the River’s aquatic resources and rice production for their subsistence. It is estimated that between 40-60 percent of the protein intake for the countries along the LMB is taken from the

⁵ In Laos the Mekong is referred to as Mai Nam Khong (Mother of Waters) which is symbolic of the fact that 35 percent of the total Mekong flow comes from Laos, and 85 percent of total land area in the country resides in the Basin. The Khmers of Cambodia refer to the Mekong River as Tonle Thom or the Big River, and the Basin covers nearly 86 percent of the land area in the country (Elhance 1999, 193-194).
fish of the Mekong (White 2002), and around $5.6 to $9.4 billion in economic revenue exists in its fisheries and secondary fishing industries alone (Dugan 2008). Additionally the water resources in the Mekong River are used by people in the lower riparian states for irrigation, power, navigation and flooding for agriculture – revealing a substantial dependence on the River for existing livelihoods.

*The Mekong Commission:*

The Mekong River Delta has been an international issue since the early 1950s when the United Nations formulated programs for developing the vast resources of the Mekong River for irrigation, navigation, power and flood control purposes. A formal basis for international cooperation among countries in the region was established in 1957 when representatives from the riparian countries of Cambodia, Laos, Thailand and Vietnam created a Mekong Committee. Early on, the cost of planning, investigation and feasibility studies were financed by the United Nations, Asian Development Bank and additional countries. However, as economic support from the United States faded after the American-Vietnam War, international banks diverted their assistance to other issue areas, and when Vietnam invaded Cambodia in 1978, all of the external plans for the Lower Mekong Basin waned (Kirmani 1990, 202).

Up until the last decade, the waning interest in the Mekong River as an international resource had not been much of a problem, due to both the River’s abundance and the level of development among the LMB states; however, economic development in Southeast Asia has made international management of the Mekong a significant issue once again. In 1995, in order to cope with growing demands for the resources of the Mekong River, the Mekong Committee established the Sustainable Development of the Mekong Agreement and the resulting Mekong River Commission. The Mekong River Commission is a group of representatives from the LMB states that meet regularly and are tasked with planning the sustainable development, use,
conservation and management of the River’s water and related resources in a mutually beneficial manner in order to achieve an “optimum use and prevention of waste of the waters through a dynamic and practical consensus in conformity of the... set rules” (The Mekong River Commission 1995, 2). In addition, the Commission is meant to ensure that the River maintains a minimum monthly natural flow during each month of the dry season and acceptable reverse flows, and guarantee notification for the construction of major projects that impact the other states’ water rights (The Mekong River Commission 1995, 4).

While the Commission has thus far been successful at maintaining the water rights of all the countries involved, in 2010 it began to face new development related issues that have threatened to undermine its previously successful governance practice for managing the River. The following section outlines some of the challenges faced by the Mekong Commission and shows how these challenges are tied into food security and economic sustainability in Vietnam’s Mekong Delta.

*Damming, Modernized Farming Techniques, Climate Change and China*

The Mekong River is among the world’s ten largest rivers. In terms of volume and water discharge, it ranks first in Southeast Asia and it is second only to the Amazon in terms of pristine large river free flowing waters. While currently one of the most underdeveloped rivers in the world, that status is changing with the growing economic progress in Southeast Asia. Development, such as full-river hydropower dams and agricultural modernization, while

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6 There are four practices outlined by the World Bank which reference how riparian countries have dealt with shared waterways. The fourth practice involves recognizing riparian countries’ sovereignty on the waters of an international river flowing in its territory, but restricts the sovereignty to ensure the rights of other countries for a reasonable share of the water resources. This practice, which is applied by the Mekong Commission, often requires nuanced treaties that take a significant amount of time and money to procure. In addition there are few enforcement mechanisms available if countries violate the treaties so even though it is perceived by the World Bank to be the most effective practice for riparian countries, it can prove ineffective as the status quo of the river is altered (Kirmani 1990, 204-205).

7 Current development of the Mekong River calls for full river dams or dams that cross the entire river channel; however alternatives have been suggested which would include using dam designs that only partially block the mainstream flow of the River (International Centre for Environmental Management 2010). Partial river dams are
creating economic gains, when coupled with climate change and the already advanced upriver dams in China has also created challenges for those who use the River. The following section more specifically addresses the pros and cons of changes along the Mekong River in order to more clearly delineate the dilemma facing Vietnam’s Mekong Delta.

While the lower Mekong River is currently not dammed, as of 2010, ten full-river (across the entire river channel) dams had been proposed to the Mekong Commission including eight in Laos-Thailand (upstream from Cambodia and Vietnam) and two in Cambodia (upstream from Vietnam). The International Centre for Environmental Management (ICEM) estimates that if fully developed to generate hydropower, the water of the Lower Mekong could produce 30,000MW of electricity annually while the entire Mekong Basin has the hydropower potential of 53,000MW (ICEM 2010, 8-10), enough electricity to supply the projected needs of all the riparian states in the Lower Mekong Basin for the coming decades. For example, with just the current 10 dam proposals (and two partial dam proposals in Laos) it is estimated that there would be enough hydropower to provide 23-28 percent of the national hydropower potential of the Lower Mekong Basin (ICEM 2010, 9). Additionally, harnessing the Mekong River for

8 Thailand for example, which may account for as much as 70 percent of the total electricity demand in the Mekong, uses two indigenous fuel sources including lignite and natural gas. These fuel sources are susceptible to being exhausted in the near future as most of the country’s forests have already been felled. The country does not have enough of the Mekong River to build substantial hydro powered dams and it already imports some electricity from Laos. About 50 percent of the total potential hydroelectric capacity of the Mekong basin is located in Laos. However, 60 percent of Laos’s energy needs are currently being supplied by fuel wood which has resulted in substantial deforestation. Despite Laos’ potential, because of its small population and low level of economic development, for the foreseeable future, the country would only be able to absorb a tiny fraction of its hydrological potential, even if it could be developed. Cambodia has the second largest hydropower potential in the LMB, however only a few small hydropower projects have been constructed. Like Laos it relies on a depleting stock of fuel wood which accounts for around 90 percent of all energy consumption. Unlike Thailand which does not have enough resources to build dams, and Laos and Cambodia which do not have the infrastructure to build dams, Vietnam has both resources and infrastructure as well as successful hydroelectric projects. The most significant issue for Vietnam is that any dam it does build is highly dependent on what happens to the flow of the River upstream. Thus creating a power source for the country to rely on is dependent on the behaviour of other countries (Elhance 1999, 198-199).
hydropower generation and irrigation via full-river dams is heralded to increase per capita income and regulate the currently unpredictable season flows (White 2002, 5).

There are many legitimate economic incentives to dam the Mekong River; however, such developments are in conflict with subsistence needs and the livelihood and security of the region’s poorest. According to Lu and Siew (2005) the common effects associated with dam construction cited in the research include: the modification of flow regimes both upstream and downstream (Batalla et al. 2004); the trapping of sediment in reservoirs and disruption of sediment transport downstream (Phillips 2004); the reduction of biodiversity due to the flooding of habitat, isolation of animal populations and blocking of migration routes; and finally changes in downstream riparian vegetation and salt water dynamics (Friedman et al., 1998).

Specific to the Mekong Delta in Vietnam, dams are expected to decrease the aquatic productivity of the Delta, threaten water quality and eventually threaten downstream dam capacity. Furthermore, upstream dams prevent the huge volume of fish that move through the Mekong River in Vietnam during the flood season. It is predicted that the entire ecological balance of the River will shift, including the possibility that the Mekong River Delta will no longer have its much needed flood season to sustain its superior rice cultivation, fill the drinking water quotas, or keep out saltwater intrusion (which now occurs 70km into the mainland during Vietnam’s dry season) because there will no longer be enough water traveling that far downstream. Although damming the Mekong River will certainly have negative impacts on Vietnam’s fisheries, stream flow, and water quality downstream, the economic incentives for production such as revenue, clean power production, and jobs imply that the lower Mekong will see significant dam construction in the near future.

In addition to dam construction, the riparian states along the Mekong have also had to deal with changes wrought from modern irrigation and farming techniques that are at odds with
long term economic and environmental sustainability. In terms of modernized farming, like damming, the Mekong Delta is facing a dilemma as the current farmer adaptation practices are linked to both gains and losses (Kakonen 2008). For example, the construction of vast hydraulic flood protection embankments, high dikes and sluice gates have reduced the damage done by floods, provided an extra rice season and increased employment. However, they have also reduced soil fertility and aquatic resources, increased the usage of agrochemicals, and caused flood damage in Cambodia and Vietnam. More specifically, the side effects of economic gains via modernizing farming techniques used by Vietnam in the Mekong Delta are linked to losses of common pool resources, including fishery, water quality, and free alluvium. Such losses to common resources end up hurting the poorest groups along the Delta either because they have difficulty in meeting the adoption requirements or they cannot take advantage of the economic scale needed to apply the modernized techniques because they have such small landholdings (Kakonen 2008). Another troubling symptom of modernized farming is that the new agricultural activities of the Mekong Delta require twice the amount of water during the driest months than all the other Lower Mekong Basin watersheds together. Such farming practices are not sustainable long-term as the water levels are likely to drop in the Delta as the upstream riparian states also modernize their farming practices.

Climate change and China are two other concerns that contribute to the problems associated with the Mekong River Basin and are worth noting in terms of predicted implications for water flow and quality in Vietnam’s Mekong Delta. First, with regards to climate change, specific statistics on the predicted effects remain uncertain and this makes it difficult to estimate the exact impact that such degradation will have on the Delta. What is known is that the sea level is rising along Vietnam’s coast. In 2001, the sea level was recorded to have risen 1.75-2.56 mm/year at four different monitoring stations along the Vietnamese eastern shore line (Wassman
et al., 2004, 92). The rise in sea level will and has impacted rice production in Vietnam, especially those species of rice that are increasingly vulnerable to salinization, as salt water now intrudes inland in Vietnam an estimated 70km during the dry season. Predictions and therefore policy prescriptions that are based purely on climate change are difficult to prescribe because the economic consequences of saltwater intrusion due to rising sea levels vary “from region to region due to deviating bio-physical and socio-economical settings” (Wassman et al. 2004, 105). However, modest adaptive measures that take into consideration the rising sea level and the reduced flow of the Mekong, due to damming and modernized farming, are worth considering in the sustainable development scheme of the Mekong River Delta.

Between 12 and 18 percent of the water flow of the Mekong and the headwaters come from China, making it responsible for a significant portion of the total water flow of the River. By 2010 China had finished or was working on four dam projects with an additional four being planned, and had thus far refused to join in talks with the LMB states as to the effect of these dams in the region. Geologists X.X. Lu and R.Y. Siew (2006) determined that water discharge has been heavily influenced by China’s dam construction on the river, and that fluctuations in the frequency and magnitude of the water level have increased considerably. In addition, sediment flux in the Mekong has decreased on the whole, and the rates of decline in areas located immediately downstream of the dam has accelerated at the highest rates, with loads-of-sediment decreasing by almost half. The projects by China to dam the Mekong River in the Yunnan province will likely continue to exacerbate the current trends of water level fluctuation and sediment-load reductions for the entire basin, with Vietnam’s Mekong Delta and Laos’s abundant river flows considered to be the most at risk. Studies on China’s dam construction reveal that areas dependent on floods to supply nutrient-rich sediments to the soil for agricultural productivity are likely to be severely deprived, although exact estimates of their impact are
difficult to anticipate. However, future policies regarding economic sustainability and food security in Vietnam’s Mekong Delta should incorporate adaptation measures that account for China’s behavior.

This brief analysis of dam construction, agricultural modernization, climate change and China has sought to highlight the dilemma for the LMB in balancing economic growth and environmental challenges with long-term sustainability and food security. As the economic demand for water has increased along the Mekong River, the water flows in terms of both quality and quantity will continue to be reduced over the coming decades. In 2010, the Mekong River Commission released a report stating that for the 8th year in a row the annual flow in the River failed to rise above average. The report highlighted that the resulting consequences to the natural flood plain of the relatively small change in water levels included issues with irrigation, drinking water and saltwater intrusion (2010, 5). Water resource managers have advocated to the Mekong River Commission that the only way to establish strong economic development and long-term economic sustainability in the Lower Mekong Basin is by conceiving of the watersheds and river basins as functional hydrologic units irrespective of geostrategic boundaries (Sneddon 2002, 727; Dixon and Easter 1991; Stanford and Ward 1992); however, such recommendations seem overly optimistic and fail to take into consideration the political limitations to such a policy. The economic and social importance of the Mekong River cannot be overstated and therefore it is important that countries most at risk, such as Vietnam, are provided aid that is targeted at helping them mitigate the threat (Dugan et al., 2006).

Canada’s Historical Interest in the Issue:

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9 For a more in-depth analysis see the “Strategic Environmental Assessment of Hydropower on the Mekong Mainstream.” (October 2010). Prepared for the Mekong River Commission by the International Centre for Environmental Management.
Canada considers itself to have “proactive” involvement in Southeast Asia (Job 2010), and has a long history of diplomatic relations that include spending an estimated $2.5 billion in total contributions to Southeast Asia since the 1950s. CIDA has supported a wide range of programming in Southeast Asia including economic development programs, academic linkages, student scholarships, gender entitlement initiatives and institution building. Canada has also helped the region create programs that advance cooperative and human security, such as the Southeast Asia Cooperation program which created think-tanks in the region to address the security issues of the post-Cold War world. As early as 1957, Canada provided funds for a United Nations Development Program (UNDP) project that included a feasibility study for a joint-program dam construction in Laos and Thailand, intended to help develop the power potential of Nam Ngum River, a tributary of the Mekong River inside of Laos. The feasibility study proved to be crucial in creating the agreement between Laos and Thailand, and Canada eventually partnered with several other countries for the grant needed to construct the dam in a program that was seen to be beneficial to both Thailand and Laos.\(^\text{10}\)

In addition to bilateral relations, Canada has also shared membership in multiple multilateral forums with Southeast Asian states, including the Treaty of Amity and Cooperation (TAC) which affirms a commitment to the Association of Southeast Asian Nations (ASEAN), the Asia-Pacific Economic Cooperation, the World Trade Organization, the ASEAN Regional Forum and the United Nations. In 2010, Foreign Minister Cannon stated in a press conference with members from the Association of Southeast Asian Nations (ASEAN) that Canada was committed to the “promotion and protection of Canadian values of freedom, democracy, human rights and the rule of law” in Southeast Asia (Job 2010, 1).

\textit{Canada and Vietnam}

\(^{10}\) Most of the power output for the plan was intended to go to Thailand because the demand in Laos was much more limited, the goal being that of cheap power for Thailand and substantial foreign exchange for Laos (Kirmani 1990, 204).
In 1973, Canada officially established diplomatic relations with Vietnam and in 1994, opened an Embassy in Hanoi with a Consulate General following in Ho Chi Minh City in 1997. Since 1990, Canada has provided approximately $660 million in development assistance through the CIDA in support of Vietnam’s economic reform and poverty alleviation initiatives.\footnote{Government of Canada, “Canada-Vietnam Relations,” 2011.} Not only does Canada provide development aid to Vietnam, but as of 2008 the stock of Canadian direct investment in Vietnam was estimated to be close to $142 million, with more large projects being planned. According to CIDA, Canada currently uses its aid in Vietnam to invest in more than fifty bilateral and partnership projects in Vietnam including significant clusters of programs in Hanoi, Ho Chi Minh City and along the border with the South China Sea. Canada’s projects in Vietnam range from rural enterprise expansion, food and agriculture products, banking reform, the environment and policy reform.

As part of Canada’s Aid Effectiveness Agenda, the government announced in 2009 that it would focus 80 percent of its bilateral resources on 20 “countries of focus”. Canada selects its countries of focus based on three primary criteria: their level of poverty, their ability to use aid effectively, and their alignment with Canada’s foreign policy (Glodfarb and Tapp 2006, 11). Vietnam, which is Canada’s country of focus in the Southeast Asia Lower Mekong Basin, was chosen according to CIDA for three main reasons. First, Vietnam has made significant development progress over the last decade and has increasingly integrated into the world economy. Second, the Vietnamese government takes strong ownership over its development assistance and has demonstrated the effective use of the aid that Canada provides. In fact, Vietnam is recognized internationally as a leader in aid effectiveness through its “strong local vision, ownership, and implementation of a robust made-in-Vietnam poverty reduction strategy” (CIDA 2011). Third, despite significant gains, Vietnam continues to face development
challenges and in 2011 was ranked 113 of 169 evaluated countries on the Human Development Index. The ranking is due in part to the fact that some sectors of the population of Vietnam are not equally benefiting from economic growth and the country remains highly vulnerable to economic shocks.

**Recommendations:**

This policy paper recommends that to maximize aid effectiveness in Vietnam, Canada must focus and narrow its aid projects by applying its resources to the places that will have the greatest long-term development gains with the lowest economic cost. Recognizing the financial limitations associated with aid, this policy paper does not seek to establish new aid projects, but rather show how diverting the focus of existing projects toward the Mekong Delta may be a wiser long-term development investment in Vietnam. In switching focus to the Mekong Delta, this analysis contends that Canada will more effectively achieve its priority theme requirements as part of its Aid Effectiveness Agenda as well as maintain alignment with Vietnam’s five-year socio-economic plan. The following section outlines Vietnam’s goals for the Mekong Delta and then systematically addresses six current or recently completed projects that CIDA has applied in Vietnam which can be, or are, related to the Mekong Delta. The description of Canada’s policies are followed by policy recommendations that address how they can be subtly changed in order to provide an example of what focusing development aid on the Mekong Delta could look like.

*Vietnam’s Policy for the Mekong Delta*

Part of what makes Vietnam such a successful country for development aid is that the government takes an interest in ensuring that the aid reaches the affected areas, and for this reason it is important to determine Vietnam’s position in the Mekong Delta. Vietnam established a five-year Socio-Economic Development Plan that was outlined by the National Assembly
In reference to the Mekong Delta, Vietnam’s five-year plan calls for the following: developing the domestic water ways, promoting industrialization, supporting modernization, and accelerating the Delta’s growth rate through improvements to agriculture, forestry, and fisheries. With regards to waterways, Vietnam’s goal is to help maintain and develop its rivers for shipping, gradually preparing to make the Mekong River and the Red River international waterways. Furthermore, and more in line with where Canada can have a significant impact through development aid, Vietnam’s five-year socio economic plan boasts a commitment to making full use of the Mekong Delta in terms of developing it into an economic zone with high, effective and sustainable growth rates, improving the socio-cultural conditions to be in line with the national averages, and improving the spiritual and material life of the local people, especially the Khmer people who live in the flood-prone areas.

**Policy Recommendations for Increased Food Security and Economic Growth in Vietnam**

**Primary:**
1. Redirecting efforts in Vietnam toward the Mekong Delta.
2. Creating a model that can be applied to river basins globally.

**Secondary:**
1. Incorporate adaption practices that will help farmers deal with future water shortages including: water-saving farming techniques, crop rotations, and retraining.
2. Avoid modernized farming techniques that increase crop yields but also increase water use. Such practices are not sustainable long-term and are proven to negatively impact poor farmers.
3. Provide support in the form of both information gathering and dissemination on the expected and current changes in the Mekong Delta. This includes helping Vietnam establish risk assessments on the effects of upriver dams for the Mekong Commission.
4. Support Vietnam’s current river monitoring system to warn of flooding, surface water quality and ground water quality. This can be done by helping Vietnam establish more river monitoring stations and outfitting such stations with devices capable of capturing the needed changes.

**CIDA’s Policy:** Tra Vinh Improved Livelihoods Project in Vietnam is a successful pilot model for rice seed production, rice-shrimp rotation, peanut planting, water-saving irrigation, and post-

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harvest service. The models have increased the incomes of the 15,000 people in the Tra Vinh province who have participated by 20 to 40 percent. Maximum CIDA contribution to this program is $9,975,910.

1. **How this policy can be improved:** The Tra Vinh project is one of Canada’s successful Mekong Delta programs. Due to its success, the format can likely be implemented in other provinces in the Delta to help improve the livelihoods of the farmers in the region. Through this program, CIDA already recognizes the importance of water-saving irrigation, crop rotation, and alternative crop use, and it should continue to prioritize adaptation practices, teaching and training in water-saving farming techniques as it extends this program to other areas of the Delta.

**CIDA’s Policy:** Soc Trang Herd and Crop Quality Improvement Project is a project that applied modern farming techniques to increase fragrant rice production in the Mekong Delta by nearly five times, from 3,600 hectares in 2005 to nearly 19,000 hectares in 2009. Maximum CIDA contribution to this project was $2,541,077.

1. **How this policy can be improved:** Similar to Canada’s work on the Tra Vinh Project which emphasizes water-saving irrigation techniques, all aspects of rice production along the Delta must incorporate long term sustainable farming practices that are able to function with reduced water supplies. This will not only prepare the farmers of the Mekong Delta, but it could also reduce the chances of confrontation in the rest of the region as people negotiate over the scarce resources of the River’s water. Canada’s current support for modernized farming techniques is counter to long-term sustainability in the Mekong Delta. Increasing rice production, while offering one or even two times more yields, has increased water use by Vietnam to an extent that it now rivals that of the three provinces to its north combined. While the Mekong River is currently in
abundance, all signs point to the fact that it will not remain this way and increasing use on this already finite resource has proven to hurt the poorest and smallest farmers along the Delta.

CIDA’s Policy: CIDA currently has a project profile for Good Governance and Aid Effectiveness in Vietnam Phase I that focuses on agriculture and agricultural development. Part of this project enables CIDA to respond to initiatives that share the objectives of improving core government systems in Vietnam, which includes development assistance in line with overall aid effectiveness. The project includes modernizing Vietnam’s agricultural and farming systems as well as improving Vietnam’s risk-management programs and so on.

1. How this policy can be improved: Risk management approaches in the Mekong Delta are in desperate need of improvement and updating which means moving towards developing scenarios that can be used by river basin authorities and water and fisheries managers in order to predict the impact of changes in water flow upon fisheries, other in-stream resources, and the livelihoods that depend on them (Arthington et al. 2008). Improvement to risk assessment would not only help Vietnam adapt to the coming changes, but it would help it in negotiations with the Mekong River Commission as the Commission takes into account economic development with the needs of all the riparian states along the Lower Mekong Basin before ruling on dam construction projects. The Mekong Commission has mentioned that one of its greatest challenges is identifying what will be the most beneficial for all parties involved, and this requires reliable data on climate, hydrology, sediment yields, capture fisheries, social, economic and cultural aspects upon which to base sound decisions (White 2002, 5). Since such data has been difficult for Vietnam to acquire, it represents an area where CIDA could offer significant resources and expertise.
a. One specific area in need of risk assessment is the impact of modifications to the freshwater input into Vietnam’s Delta caused by both sea level rise and reduced water quantity. Although a subject of great concern, the lack of fresh water has yet to be adequately quantified and it remains unclear what the exact effects of salinization will have on the agriculture, vegetation structure and subsequently the livelihood of local populations (Dugan et al. 2006). Canada could lend resources to this area by providing risk assessments with regards to the effects of salinization in the Delta.

CIDA’s Policy: Knowledge Building and Policy Dialogue Initiative in Vietnam is a program through which CIDA is able to strengthen knowledge and support analysis of development issues pertaining to Vietnam. The initiative is meant to provide a means to identify development needs and strategies in collaboration with multilateral institutions, donors and potential recipients. The maximum CIDA contribution to this project is estimated at $250,000.

1. How this policy can be improved: While a relatively small funded project, it is through this initiative that Canada could have one of the greatest impacts, as currently the greatest needs in the region are related to information gathering and dissemination. Directing CIDA’s knowledge building initiative toward the Mekong Delta could have an impact in the following areas: effective interaction with concerned community organizations, information on water-fish dynamics and the needs of the population (especially the region’s poorest), and improving understanding of the changing quality and quantity of the River’s flow.

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13 For example, recent studies in Vietnam show that there are socially viable approaches for integrating fish into rice culture systems; however, more work in terms of knowledge-building needs to be done in order to understand the economic viability of such options in the Delta (Dugan et al. 2006).
CIDA’s Policy: Support Program to Respond to Climate Change in Vietnam is a program in which CIDA aims to assist the government of Vietnam to address priority issues established in the National Target Program. The maximum CIDA contribution to this project is $4,450,000.

1. **How this policy can be improved:** Currently Canada is focusing its climate change programs in Vietnam on *mitigation* with only some emphasis on *adaptation*. Climate change aid in Vietnam would likely have more of an impact if it targeted adaptation measures, as developing countries such as Vietnam are believed to be unlikely to possess the coping mechanisms necessary to deal with environmental change and are already not significant contributors to emissions (Black 2011). The Delta provides a prime place for Canada to work on climate change adaption as it is currently at the greatest risk for saltwater intrusion, land subsidence, and reduced sediment flow due not only to climate change, but also to human degradation. If Canada is able to help Vietnam establish successful adaptation measures for the Mekong Delta it could be used not only as a model for Vietnam’s northern Red River Delta but also for similar deltas under duress from sea level rise and anthropogenic threats, such as those in Malaysia and Bangladesh.

CIDA’s Policy: The Project for Vietnam’s Floods is an initiative that works with the International Federation of the Red Cross to deliver immediate humanitarian assistance in order to maintain the health and physical security of residents affected by flooding.

1. **How this policy can be improved:** Drought and flooding are of particular concern for Vietnam which has proven especially susceptible to both, but while relief efforts can be helpful, preventative measures have proven more beneficial in the long-term. One way that CIDA can help is through providing and improving Vietnam’s water monitoring stations. Currently there are only 17 river monitoring stations that report on flooding in
the entire Lower Mekong Basin. In addition, there is no consistent monitoring of groundwater along the Lower Basin, which is especially important during droughts and essential for capturing contaminated and falling water tables which result in land subsidence and salinity intrusion in the Mekong Delta. In order to protect the livelihoods of those who live along the Mekong Delta in Vietnam, increases in the number, quality, and expertise of water monitoring stations is a necessary precaution and an area in which Canada possess significant expertise.

**Global Implications:**

While this analysis is focused predominately on the Mekong River Basin, specifically as to how the changes affect the Mekong River Delta in Vietnam, the results can have implications for river basins all over the world. 40 percent of the world’s population live in the approximately 214 international river basins that cover almost half of the global land area (Browder and Ortolano 2000, 499). Consequently, when a developing country looks to alleviate its present or prospective water shortages by making more or better use of the water in its rivers, the chances are high that those rivers flow through a number of other countries and that those countries will be concerned with how their upstream riparian neighbor reduces the quality and quantity of the shared water (Elhance 1999, x). Chris Sneddon writes that while thinking of a river basin as an environmental resource amenable to co-management may have conceptual and practical advantages, the political and socioeconomic obstacles to creating effective co-management regimes are substantial (Sneddon 2002, 725). Self-interest tends to dictate the attitudes and positions of the parties involved in water relations. Thus, according to many observers, the stage is set in the coming decades for water wars, or violent conflicts driven by the search for secure and sufficient supplies of freshwater. If Vietnam and the riparian countries along the Mekong
River Basin are able to successfully weather the challenges faced by developing the Mekong River, it may create a model that could be applied to other basin states.
For more information about this topic, you may find these sources useful:


This article tells about the history of the Lower Mekong River Basin management, and provides a historical context for the creation and the Mekong River Commission.


This article addresses the potential effects of mainstream dams on the Lower Mekong Basin, specifically with regards to the fish population.


This article more specifically tackles the dilemma of development of the Mekong Delta in Vietnam.


This article addresses the potential international security conflicts facing countries along the Lower Mekong River Basin as they decide to develop the river and complexities associated with the development process.


This is a report written for the Mekong River Commission and outlines the factors, both beneficial (hydropower and economic gains) and detrimental (agriculture, flooding, sediment flows), associated with damming/developing the Mekong River. It provides statistics, maps, and information related to all states along the Mekong River.
**Comprehensive Bibliography:**


Job, Brian. (August 25, 2010). “Revitalizing Canada-Southeast Asia Relations: The TAC gives us a Ticket but do we have a Destination?” Asia Pacific Foundation of Canada.


