

*In early July of this year, news reports emerged of a pending deal between the Metropolitan Waterworks and Sewerage Services (MWSS) and San Miguel Bulk Water Inc for the implementation of the long-proposed Laiban Dam Project through a joint venture agreement. Since these reports came out, allegations of non-transparency in the entire negotiation process between the MWSS and San Miguel have been hurled by the National Economic Development Authority against the MWSS. Local and environmental groups, on the other hand, have risen again against these new developments, condemning the project itself for its disastrous impact on the lives of the families residing in the project area.*

*Standing 113 meters high, the proposed dam project is designed to sit on the vast and mountainous Kaliwa watershed in Tanay, Rizal covering an estimated total area of 28,000 hectares. Old studies estimate that the dam would be able to supply a total volume of 1900 Million Liters per Day (MLD). Diversion tunnels and other infrastructure will hijack all water from the entire watershed area, directing the catchment to the dam reservoir for the purpose of addressing an alleged water shortage in Metro Manila's potable water supply. A previous estimate of 4,413 families are to be relocated, and a larger number outside the reservoir area will be at risk of flooding from any possible dam breaks. The estimated cost for the project has been pegged at Php 47.929 Billion<sup>1</sup>, the costliest infrastructure project thus far to be implemented by the MWSS.*

*In response to the rising opposition directed against the dam project, the MWSS and other dam proponents have continually highlighted a catastrophic water supply crisis in Metro Manila. The capital's available water supply, which is currently extracted entirely from the Angat Dam, is said to be grossly insufficient in meeting future water requirements. Time and again, the water supply requirements of the Metro Manila population have been used as their main justification for pursuing a project as damning and devastating as the Laiban Dam.*

*The Freedom from Debt Coalition rejects the rationale proffered by the MWSS for pursuing the Laiban Dam project. We oppose the Laiban Dam Project itself, firmly believing that the framework and principles on which the proposed project is based are fundamentally flawed. While affirming adequate water supply distribution as both a strategic prerequisite to economic growth and a state obligation to be ensured and demanded, we stand by the principles of equity, sustainability, and human dignity. Every framework or blueprint for securing adequate water supply must be guided by such principles, and it is the blatant neglect of such principles that renders the Laiban Dam absolutely unacceptable. Below is a detailed explanation of FDC's opposition to the Laiban Dam.*



# **Abandon the Laiban Dam**

**A Position Paper of the Freedom from Debt Coalition**

**August 2009**

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## **I. ANY LARGE DAM PROJECT SHOULD ALWAYS BE PURSUED ONLY AS A LAST OPTION.**

The proposed Laiban Dam project qualifies as a large dam<sup>2</sup> under the definition of the International Convention on Large Dams (ICOLD). As such, the decision-making process employed in considering the implementation of the proposed Laiban Dam project should

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- 1 NEDA approved an estimated project cost of 47.929 Billion in 2007, although other reports allege that the actual cost may exceed such an estimate due to inflation and large cost overruns which the WCD noted as typical of large dam projects.
  - 2 ICOLD classifies as large dams those that stand beyond 15m in height.

clearly adhere to the guidelines provided by the World Commission on Dams (WCD). In sum, the World Commission on Dams lays down the general rule: “Where other options offer better solutions, they **should** be favored over large dams.” Widespread opposition against the construction of large dams, which has ultimately brought forth the decommissioning of large dams all over the globe are clearly well-founded. As noted in the WCD's survey of 125 large dams, the construction of large dams have been found to have often led to:

- loss of forests and wildlife habitat
- loss of species populations
- degradation of upstream catchment areas due to the flooding of the reservoir area
- loss of aquatic biodiversity
- the physical displacement of 40-80 million people worldwide
- loss of livelihoods for people displaced and communities affected
- adverse health and livelihood outcomes for those living near or resettled from the reservoir area.

The Kaliwa Watershed, in which the Laiban Dam is posed to be undertaken, is also said to be a natural habitat of 121 species, 35% of which are endemic to the Philippines. Among the species that will be dislocated by the construction of the Laiban Dam, five are considered to be globally vulnerable: The Philippine eagle, the Rufuos Hornbill, the Tarictic Hornbill, the Philippine Brown Deer and the Luzon bearded wild pig. The project area itself contains a protected mossy forest area of 103 hectares and a virgin forest area spanning 2,479 hectares. With the construction of the Laiban dam, these rich habitats will be lost underwater.

Apart from the confirmed risks associated with large dam projects, risks of flooding and increased seismic activity have also been associated with large dams and reservoirs. In considering the Laiban Dam Project, therefore, it would be imperative on the MWSS to undertake a painstaking and comprehensive assessment of the costs, gains, and alternatives to the project and implement such a project only as a desperate option.

**A. MWSS has pursued a reckless obsession with the Laiban Dam.** There is no evidence, however, to show that the MWSS and other Laiban Dam proponents have heeded such a stern warning against large dams. The actuations of the MWSS for the past six years have instead signified a blind obsession to pursue the dam project against all odds.

Since 2003 when proposals for the dam project were again resurrected, the MWSS has virtually chased a number of financing schemes in order to implement the project. It withdrew the project from an ADB study in order to take advantage of Manila Water's offer to pursue the updating of project documents through a private consultant<sup>3</sup>. The said private consultant, Daruma Technologies, completed its updating and review of previous Laiban Documents in March of 2007. Even before such updating of vital documents was completed, however, the MWSS already pushed for the project to be included in NEDA's list of priority infrastructure projects to be included in the Comprehensive and Integrated Infrastructure Program. Such moves indicate that MWSS had already made up its mind in pursuing the project regardless of what the outcome would be of the study conducted by Daruma, a study which significantly included a review of the environmental and financial impacts of the proposed project. If such a review was indeed completed, it was conducted only with half-hearted sincerity as a

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3 The MWSS' project completion report for ADB's New Water Sources Development loan reports that the Laiban Dam component was withdrawn after an agreement was reached for its concessionaires to finance the study.

procedural requirement to gain NEDA's nod in including the project for possible financing by China.

From the time that Chinese financing for the project was shelved, MWSS has continuously attempted to force the project's implementation via all avenues possible. Their obsession with the Laiban Dam Project brought forth a controversial memorandum of understanding with American firm CalEnergy in 2008 which was heavily criticized for the absence of any public bidding. In only a year's time, we now have another controversial deal in the making, this time with the San Miguel Consortium. This impending deal has again received serious attack from no less than NEDA itself for the clear lack of transparency and public disclosure afforded by MWSS to concerned agencies and organizations.

*The manner by which the MWSS has pursued the Laiban Dam Project betrays a blind obsession to implement it*, by hook or by crook, with but little effort to properly address concerns raised against the project itself.

**B. An examination into MWSS' threats of "another" impending water crisis shows such scare tactics to be based on weak assumptions.** The benefits that are to be gained from the construction of the Laiban Dam do not justify the environmental, social, and cultural damage that the project will inflict. The MWSS has consistently been scaring the public of an impending water crisis in order to justify the dam project. This "water crisis" theory, however, when examined more closely, shows itself to be nothing more than a scare tactic to coerce Metro Manila consumers into supporting the project despite the clear damage that this project will necessarily inflict on the communities residing inside and around the project area.

*An examination into the actual water needs of Metro Manila's population shows that we currently have more than enough available supply for our actual basic needs.* This takes nothing more than simple math. With a current population of 12 million people, our basic water needs require only about 600 MLD or 600,000 cubic meters per day<sup>4</sup>. Even if our population grows by 50% come 2015, we would only require 900 MLD to meet the basic water requirements of an 18M population. This is still well within the existing supply of 4090 MLD. Contrary to the alarmist scenario being painted by MWSS and other dam proponents, therefore, the basic water needs of the Metro Manila population do not require the Laiban Dam's additional supply of 1900 MLD in order to be met.

*If our basic water needs are not at risk, then why is MWSS saying that we need more water by 2015?* Firstly, MWSS' demand projections are not based solely on the domestic water needs of Metro Manila. These projections consider not only the domestic requirements of a growing population, but also take into account projected industrial and commercial water consumptions and projected increases in per capita consumption. Projected increases in industrial and commercial water demand play a significant part in MWSS' doomsday prophesy of a water shortage. In the case of Maynilad, they are projecting an increase of roughly 178% in non-domestic consumption between 2005 to 2015<sup>5</sup>. The premises and basis behind such projections of increased industrial and commercial demand must be properly laid down particularly in light of a global crisis where such projections of increased industrial growth seem quite at odds with reality.

Projected increases in per capita consumption is another devil to be reckoned with when we speak of MWSS' demand projections. Per capita consumption refers to the average water

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4 The WHO prescribes a basic water volume of 20L or 0.02 cu.m per capita per day to meet water and sanitation needs, but other groups subscribe to a minimum of 50L per capita per day.

5 From a non-domestic consumption of 387.8 MLD in 2005, Maynilad projections estimate a non-domestic consumption of 693.1 MLD by 2015.

consumption of each individual in the service area. Demand projections often make use of actual per capita consumption rather than the basic per capita requirement of 50L per day when they speak of our water “needs”. The problem with making use of average per capita consumption in such projections is that the resulting projections often balloon the actual required volume to meet the population’s water and sanitation requirements. Average per capita consumption differs from area to area, depending on the population’s tendency to either conserve or waste the available water supply. At present, consumers in the MWSS area are estimated to consume around 100-105 liters per day, or twice the minimum requirement of 50 L. To meet the standard consumption of MWSS’ twelve million consumers, a daily supply of 1260 MLD is therefore required, still well within the available supply of 4090 MLD.

The difference between our average per capita consumption and the actual minimum consumption required to meet human water and sanitation requirements also shows how increased efforts on the part of the population to conserve water can actually go a long way in averting any alleged water crisis. Rather than encouraging such conservation efforts, however, the MWSS in its demand projections seeks to encourage greater consumption among the population. In their demand projections, MWSS does not simply use actual per capita consumption to estimate future water supply requirements, but instead bases such projections on “expected” increases in per capita consumption. In some studies, projections have been based on “expected” per capita consumption of as high as 150L, or thrice the minimum volume of 50 L. The demand projections being touted around by the MWSS are therefore highly questionable not only with regards to the accuracy of these projections but also with regards to their clear abandonment of environmental principles that call for the conservation of finite resources such as water.

**C. Serious consideration of other alternatives must be comprehensively exhausted.** If indeed water supply demand is to increase in the near future, however, as the MWSS asserts, other alternatives must be comprehensively studied and exhausted. Among the alternatives that may be explored is the reduction of Maynilad’s water losses or non-revenue water level. Based on most recent available data, Maynilad’s non-revenue water stands at 69%. With 2363 MLD allocated to Maynilad for its water supply distribution, Maynilad is in effect servicing its present connections with only about 733 MLD. The recovery of Maynilad’s non-revenue water by only 20% would translate into an additional volume of 472.5 MLD that would reach consumers in the West zone. A reduction of 30% in Maynilad’s NRW volume, on the other hand, would translate into an additional volume of 708 MLD, almost equivalent to the same volume now being supplied by Maynilad to its existing connections.

A comprehensive exploration of small-scale surface water development projects must also be undertaken. The MWSS’ fixation with large surface water projects must come to an end. Large surface water projects, particularly the construction of large dams, serve only to award bragging rights to the implementing agency, at the expense of communities and consumers that shoulder the social, cultural, environmental and economic costs of these destructive projects.

Furthermore, it is this fanaticism over large-scale water development projects that brought the MWSS to its current predicament of absolute dependence on only one singular water source which is the Angat Dam. Our dependence on a large-scale water source makes us especially vulnerable to potential emergencies. Any solution to this predicament, however, must break free from the previous fanaticism over large-scale supply sources and pursue instead the exploration of scattered small-scale projects.

## **II. THE LAIBAN DAM PROJECT BEARS GRAVE IMPLICATIONS FOR THOSE CURRENTLY RESIDING IN THE RESERVOIR AREA AND THE LARGER POPULATION.**

Apart from the blatant deficiencies in the decision-making process undertaken by the MWSS in choosing to pursue the Laiban Dam project, the damage that will ensue from the implementation of the said project is both unjustifiable and intolerable.

**A. The project entails large and direct injury to the local communities within and around the project area.** Based on previous studies conducted on the Laiban Dam Project, an estimated number of almost 5,000 families, largely from the indigenous people of the Dumagats and Remontados, will be dislocated. Eight barangays are to be inundated, resulting in the destruction of residential and community structures such as school buildings and barangay centers, as well as tilled lands. The resettlement of affected communities translates not only into their physical dislocation but also in the loss of livelihoods that were dependent on the riches of the watershed from which they will be uprooted. The dislocation takes on a deeper significance for the indigenous people of the Dumagats and Remontados, whose lives are heavily attached to their lands and waters.

Outside of the dam's project site, communities from surrounding and downstream communities will also bear heavy consequences for the construction of the dam project. The diversion of river flow into the dam's reservoir entails a reduction of available water for the irrigation of neighboring farm areas. Water flow to the Agos river will also be greatly diminished since water from the Kaliwa river that used to flow downstream into the Agos river will now be held hostage by the proposed dam. The downstream communities of Gen. Nakar, Infanta and Real will suffer losses in income derived from their fishing and farming activities, the two primary livelihoods for these downstream communities.

Possibly the most devastating risks related to the Laiban Dam Project are the flood and earthquake disasters that could claim the lives of communities dwelling around the project area. Flood disasters caused by dam breaks have already claimed the lives and homes of many communities around the globe. While dam proponents may assert that they can design the Laiban Dam to withstand pressure from the water volume to be contained within the reservoir, their confidence carries little weight. Similar MWSS projects in the past have often been found wanting in their design. A recently completed one, the Umiray-Angat Transbasin Project, boasted of intake works that were said to be designed to withstand flood pressure for as long as 1,000 years. By November 2004, however, the said infrastructure was already heavily damaged and was shut down for two months. The stability of the proposed dam structure becomes more uncertain when we consider the presence of earthquake faults in the project area, five of which were identified to be active in previous studies.

**B. Implementation of the Laiban Dam project will result in rate increases that are disproportionate to the perceived gains that general consumers will receive from the project.** According to some reports, MWSS may have to purchase water from San Miguel Consortium at a rate of Php18-20 per cubic meter. This will bear heavily on the water billings of MWSS consumers. At present, our billings do not reflect any price for raw water itself. If the negotiations between San Miguel and MWSS ripen into a joint venture agreement, however, consumers will be made to bear an additional cost of Php18-20 for each cubic meter in addition to the water rates presently being collected by Maynilad and Manila Water for water distribution.

By agreeing to purchase bulk water from a private contractor such as the San Miguel Consortium, MWSS will be committing its consumers to pay unprecedented costs for a natural resource such as water. In other parts of the country where such bulk water

contracts<sup>6</sup> have already been undertaken with private contractors, these contracts have resulted in undemocratic water rate increases. Increases in the bulk water price may be easily and arbitrarily demanded by a private contractor such as the San Miguel Consortium, with the threat of a supply cut-off as its main bargaining chip.

Such demands can succeed even in the face of so-called contractual provisions against them, particularly in light of the MWSS' weak regulatory and negotiating skills which many times have resulted in concessions grossly disadvantageous to Metro Manila's consuming public. If the MWSS has been virtually unsuccessful in mitigating or regulating the rate increases demanded by its two private concessionaires for the past eleven years, then there is no basis for any assertion that it can actually hold its ground against any rate demands that may be posed by the San Miguel Consortium.

Already there are reports of a take-or-pay provision contained within the draft JV agreement of MWSS and San Miguel, the same draft JV agreement said to have been submitted to the Office of the Government Corporate Counsel for review in June of this year. Such a provision provides for the payment of a specified volume of water supply each day, and burdens the buyer (MWSS) with the associated risks related to the inaccuracy of any supply-and-demand projections. There are two scenarios by which such a provision is disadvantageous to MWSS consumers. Firstly, if the supply projection of 1900 MLD exceeds the actual volume that can actually be depended on daily from the water supply project, MWSS may find itself paying for volumes of water that are not actually delivered. The MWSS will therefore undertake the hydrology risk of the project and commit itself to paying a specific sum, regardless of the actual supply that is extracted from the reservoir. A second scenario may also take place, wherein the over-estimation of demand projections will lead to an oversupply of water, ergo the 1900 MLD to be supplied will not actually be consumed. With a take-or-pay provision in place, MWSS consumers will have to shoulder the costs of the excess water supply.

Even without a joint venture agreement with the San Miguel Consortium or any other private sector company, MWSS consumers will still find themselves heavily burdened by the project costs. The project has already been estimated at \$1 Billion, making it the most expensive water supply project of the MWSS to date. Huge cost overruns, which are typical of a large dam project such as this will further jack up the project cost, possibly to as much as double the estimated cost. In the end, every last centavo spent for the project would be recovered from MWSS consumers.

**C. Budgetary allocations that are gravely needed by the water sector are at risk of being siphoned by the project.** At present, the national government has chosen to let Metro Manila consumers fend for themselves. All costs for water supply distribution and water infrastructure projects in the MWSS area are being collected directly from consumers, without benefit of any government subsidy or budgetary allocation. Even the operating expenses for the MWSS Corporate Office and the MWSS Regulatory Office are being sourced from the two private concessionaires, who in turn, source such costs from the consumers themselves. This situation has become tantamount to the state's abdication of its clear obligation to directly ensure access to safe water, and, has consequently resulted in the disconnection of consumers who could not keep up with the incessant rate increases as well as the prolonged agony of communities that have been de-prioritized as risky markets.

While the government has consistently refused to allocate state resources for ensuring water access for the urban poor in Metro Manila, however, it is now on the verge of extending

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6 Bulk water contracts with private suppliers have already been undertaken in the cities of Cagayan de Oro and Legaspi.

those resources to the San Miguel Consortium through a performance undertaking<sup>7</sup>. This performance undertaking translates into a simple guarantee from the government that the private supplier will be paid whatever is agreed upon, regardless of what happens in the future. *In short, should the demand projections of the MWSS fail to ripen into actual demand, or should Metro Manila's consumers refuse to pay for unused and excess water supplied by the Laiban Dam, payment for these obligations will be undertaken using state funds.*

| <b>Actual Volume Consumed (MLD)</b> | <b>Excess Volume (MLD)</b> | <b>Payment for Excess Volume</b> | <b>Total Payment Per day</b> | <b>Payment for Excess Volume/yr</b> |
|-------------------------------------|----------------------------|----------------------------------|------------------------------|-------------------------------------|
| 500                                 | 1400                       | 25.2 M                           | 34.2 M                       | <b>9.198 B</b>                      |
| 700                                 | 1200                       | 21.6 M                           | 34.2 M                       | <b>7.884 B</b>                      |
| 900                                 | 1000                       | 18 M                             | 34.2 M                       | <b>6.570 B</b>                      |
| 1100                                | 800                        | 14.4 M                           | 34.2 M                       | <b>5.256 B</b>                      |
| 1300                                | 600                        | 10.8 M                           | 34.2 M                       | <b>3.942 B</b>                      |
| 1500                                | 400                        | 7.2 M                            | 34.2 M                       | <b>2.628 B</b>                      |
| 1700                                | 200                        | 3.6 M                            | 34.2 M                       | <b>1.314 B</b>                      |
| 1900                                | 0                          | 0                                | 34.2 M                       | <b>0</b>                            |

Supposing, for instance, that the actual demand for water from the Laiban Dam amounts to only 900 MLD. With a take-or-pay provision for 1900 MLD in place, the MWSS will need to shell out Php18 Million each day for the excess 1000 MLD<sup>8</sup>. *If consumers successfully refuse to pay for this excess volume, then ultimately payment for the excess volume will be sourced from national coffers,* amounting to a national expenditure of Php 6.57 Billion each year wastefully spent to guarantee the cash flow of the San Miguel Consortium. Such expenditures on the part of the national government will end only in three scenarios: a) until actual demand catches up with projected demand, or b) until the San Miguel Consortium has fully recovered its costs plus profit for the dam project, or c) until the San Miguel Consortium manages to coerce the MWSS into buying out its share in the wasteful joint venture project.

*The use of state resources via a performance undertaking to guarantee the cash flow of a private corporation is an injustice to the consumers of Metro Manila.* The same government allocations are more desperately required by consumers whose connections have been unilaterally cut off due to their inability to pay their rising water bills. In the fringes of MWSS' service area, local communities are taking on the task of providing water systems for themselves without any form of support from the national coffers. Even within the existing coverage area, homeowners of private subdivisions are being made to come up with millions of pesos to defray piping costs that the concessionaires refuse to undertake. *State resources should be allocated to guarantee these consumers' access to water, rather than to guarantee the business risk of a private consortium.*

7 The memo of the Office of the Government Corporate Counsel to the MWSS dated 16 June 2009 refers to a performance undertaking wherein the MWSS is obliged to “submit the performance undertaking of the Republic of the Philippines, to secure MWSS' performance of its obligations”

8 At a rate of Php 18.00 per cubic meter. (1 MLD = 1000 cu.m)

**In sum, the Freedom from Debt Coalition believes that:**

- The proposal to proceed with the Laiban Dam project is borne out of a dangerous and flawed decision-making process that (1) was blinded by a dogged fanaticism to pursue large-scale trophy projects, (2) is based on shaky demand projections that encourage increased water consumption as opposed to water conservation, (3) neglected globally-accepted concerns and recommendations against large dam projects.
- The Laiban Dam Project, if implemented, will not be beneficial to the people and grossly disadvantageous to the government. It will result in (1) large and direct injury to the local communities within and around the project area, (2) rate increases that are disproportionate to the perceived gains that general consumers will receive from the project, (3) the siphoning of budgetary allocations that are more gravely needed by other water sector concerns, and (4) with the government guaranteeing the risks, it will further aggravate the government's debt stock and indebtedness and its precarious fiscal position.
- Regardless of how it is proposed to be undertaken, whether as a joint venture project, a concessional loan, or as a state-funded project, the Laiban Dam Project should be conclusively and finally abandoned.