### **HIDDEN COSTS**

## An initial look at women's conditions under the Casecnan Multi-Purpose Irrigation Power Project

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#### Author's Note:

As the title suggests, this article raises the possibility of "hidden costs" that specifically, women in the vicinity of the Casecnan Multipurpose Irrigation and Power Project (CMIPP), may have paid for because of this undertaking. This focus on initially probing the effects on women was intended, not only with respect to the author's masteral studies in Women and Development, but also because she found too little attention given to gendered impacts, even in researches conducted by NGOs on CMIPP. This article should not therefore be expected to present a comprehensive assessment of the social and economic toll of CMIPP and other dam projects on the various sectors of entire communities, as this was not the author's original intent. It will entail a separate endeavor to look at the far-reaching effects of CMIPP on other sectors such as the construction workers hired and the Bugkalot people. This is simply an effort to flag questions on women and CMIPP. On a more personal note, this is an attempt at taking small, tentative steps towards a subject of inquiry and research that the author would like to undertake more exhaustively in the future.

#### Introduction

On February 22, 1994, President Fidel V. Ramos started seriously toying with the fate of Cagayanos as he directed the Secretaries of Agriculture, Energy, Environment and Natural Resources (DENR), Finance and Economic Planning, the president of the National Power Corporation (NAPOCOR) and the administrator of the National Irrigation Authority (NIA) to commence negotiations with the Casecnan Water and Energy Consortium for the development on a Build-Operate-Transfer (BOT) basis of a multipurpose irrigation project in Casecnan, Central Luzon. A year before, NIA had reportedly began scouting for investors to address the inadequacy of irrigation water from the Pantabangan Dam.

No other competitive bids in the legally prescribed period came in, the government reported, save for an unsolicited proposal (attended by a \$5 million bond) from California Energy Casecnan Water and Energy Company Inc. (CE-CWEC)¹. On June 30, 1995, the Ramos government gave the go-ahead on the construction of what would be known as the Casecnan Multi-purpose Irrigation and Power Project (CMIPP).

Completed in 2001, two years later than targeted,<sup>2</sup> CMIPP has been touted by its creators as one of the world's engineering marvels. "We are extremely proud of the Casecnan project and celebrate its commercial operation," David Baldwin, president of CE Casecnan was quoted as saying when he announced that CMIPP had achieved commercial operations "It serves as an environmental and technological showcase for the Philippines and for our entire company." The company factsheet further emphasizes that: "Energy from the Casecnan project is produced by non-polluting, renewable, indigenous hydroelectric sources."

Government officials have likewise been profuse with praise for CMIPP. Ousted President Joseph Ejercito Estrada, congratulating former President Fidel V. Ramos for initiating the project, lauded it as "...a major step towards our goal of self-sufficiency in rice production...[that] will also generate thousands of new jobs in the agricultural sector not only in Central Luzon but also in the provinces of Quirino, Aurora and Nueva Vizcaya. Its multiplier effects will certainly have a big positive impact on the economy of the Philippines."<sup>5</sup>

Then Agriculture Secretary Leonardo Montemayor highlighted CMIPP's capacity to boost agricultural modernization and secure rice sufficiency for the Philippines by 2004, targets of the President Gloria Macapagal Arroyo's *Ginintuang Masaganang Ani* program.<sup>6</sup> Montemayor added that the CMIPP's improvements to the country's irrigation systems would enable the production of an additional 465,000 tons of rice per year for at least 50 years; recover 43,000 hectares of ricelands damaged by the Mt. Pinatubo eruption; and foster conditions for the creation of 18,000 jobs that would thereafter, benefit 80,000 people in the agricultural sector alone.<sup>7</sup>

It would appear that CMIPP has brought much promise to everyone for so relatively small a price – a few trees cleared, water diverted from overflowing rivers to parched ricefields, some loose gravel dumped here and there along banks of major river tributaries. But the image is fast eroding, as CE Casecnan may have noticed. Sometime in 2002, the firm that built and operates it ran several full-page paid advertisements in a leading national newspaper that showed a vast, densely forested mountain range and nothing else, obviously to stress an oft-cited claim that the Caraballo Range had sustained practically no damage from the project. In little time, however, the CMIPP contract has turned out to be fraught with irregularities, prompting civil society organizations to demand

a probe, and government to create an inter-agency review committee to assess the project along with other similar controversial BOT deals. Issues surrounding Casecnan have also been subjected to the glare of the Blue Ribbon<sup>8</sup> and Energy Committees of the Senate and Lower House respectively who are conducting their own investigative hearings into CMIPP's status and operations.

Painfully, too, the realization is sinking in that government's warped utilitarian bent to "always decide for the greater good of the greatest number" does not always hold, and in the case of CMIPP, may in the long term lead to the greater harm for the greatest number, that is, poor and marginalized communities. Who establishes what is "the greater good"? And who decides that a few hundred indigenous people or a handful of rural women are not as significant an element in economic productivity as, say, farmers in Central Luzon?

Many are challenging the assumption of mainstream economic planners that the avowed benefits of development will redound to the benefit of all. That other variables bear watching because the development experience does not take place in a vacuum but is shaped by historical, socio-economic, political, cultural institutions/structures and events. These same factors influence specific projects and target beneficiaries caught up in the process. Even the way development and the targets of economic productivity and growth are defined and understood bear their imprint. Inevitably, women, who are at the onset already trapped in structures of oppression and have to suffer positions of disadvantage and marginalization that prevent them from having a true say or even just accessing decision-making processes — find themselves bearing the harshest consequences of ill-conceived development programs and projects.

Overall, the project has been clouded by controversy arising from contractual anomalies, insufficient technical merits and even transgressions of Philippine law. There are possible violations of the BOT Law prohibiting direct subsidies for unsolicited proposals like CMIPP but which the Philippine government granted. Constitutionally, issues have even been raised in allowing a 100% foreign-owned company continued control and operations over a resource extractive activity. Many other costs, especially to women and the environment, remain unaccounted for.

#### **Background and Description of the Project**

Government accounts point to problems caused by the unreliable irrigation supply of the Pantabangan Dam in Nueva Ecija. As early as 1993, NIA called for investors to finance a project addressing this issue. In 1994, CE Casecnan submitted a single unsolicited proposal for a \$400-million hydropower project. According to NIA's Project Report, the Ramos government promptly approved the project in June 1995 through the Investment Coordinating Committee (ICC).

The project is located in Bgy. Pelaway, in the municipality of Alfonso Castañeda at the southeastern portion of Nueva Vizcaya. To the northwest and southwest, rise the Caraballo Mountains; to the southeast, the Sierra Madre mountain range; and to the northeast, land ridges guiding the upper Casecnan and Gabe rivers.<sup>12</sup> There, in Pelaway, lies the point of diversion of the Casecnan and Taan Rivers through two runoff weirs or low dams and intake structures set up along the Casecnan and Taan Rivers. An 80.46-kilometer access road was also built during project construction.<sup>13</sup>

As a combined irrigation and hydro-electric facility, CMIPP will diver 802 million cubic meters of water per year from the Casecnan and Taan Rivers, to the two diversion portals in Nueva Vizcaya, which then will channel the river waters into an underground transbasin tunnel. The 26.27-kilometer and 6.5-meter wide tunnel passing through the Caraballo Range, carries the diverted river waters which finally will pour into the Pantabangan reservoir in Nueva Ecija.

Just before reaching the Pantabangan Dam, water is delivered to an underground hydroelectric powerhouse at the end of the tunnel in Manablon, Nueva Ecija where two turbines harness the energy generated from the elevation differences of the Casecnan and Taan watersheds. This feeds into the Luzon switchyard where transmission lines of the National Power Corporation (NPC) connect to power stations.

#### Technical and Financial Terms of the Project14

Average electricity generated
Average irrigation water delivered
Land irrigated
Energy rate to be paid by NIA to BOT contractor
Energy rate to be paid by NPC to NIA
to BOT contractor
Water rate to be paid to NIA to BOT
contractor

603 gigawatt hours/yr 802,000,000 cubic m/yr Additional 50,000 has. \*\$0.059/kWh

\*\$0.061/kWh

\*\$0.029/cubic meter

Other estimated government expenses: New transmission line Upgrades of existing irrigation infrastructure

\*\$4.7 million \*\$73.6 million

\*1994 Exchange rate

#### **Project Timetable**

Execute project agreement between NIA and the BOT contractor and Power Purchase Agreement between NPC and NIA Begin construction Completion

On or before November 1994 1st quarter 1995 2<sup>™</sup> quarter 1998

Because the water delivery fee is protected by an escalation adjustment for inflation amounting to 7.5 percent per year, water rates have gone far beyond \$.029/cubic meter. As of CE-CWEC's 2001 report to the US Securities and Exchange Commission, water rates have risen to 9.07 US cents/cubic meter. Energy rates have made the same leap, from \$.059/kWh to almost 16 US cents/kWh. 15

#### Out of the Woodwork—issues publicly raised on CMIPP

Government and CE-CWEC promised many things, primarily the maximum utilization of the Pantabangan Dam, and more:

- providing irrigation to 35,000 hectares of new service areas covering the Muñoz Science City, Guimba, Talugtog, Cuyapo and Nampicuan in Nueva Ecija
- ensuring irrigation for the 102,000-hectare Upper Pampanga River Integrated Irrigation Systems area
- supplementing the electricity requirements of 350,000 households in Northern and Central Luzon<sup>16</sup>
- generating 140-150 MW of hydroelectric power that would in turn generate 450 MW of additional electricity

All these, are yet to materialize. In the meantime, evidence is building up that the Filipino people may have been entrapped in a terribly bad deal that would exact grave financial, social, economic and environmental damages over a 20-year period.

The Casecnan project has drawn in two American firms: the California Energy Co., the largest independent geothermal power firm in the world<sup>17</sup> and its sister company Peter Kiewit. Each firm has a minimum 35 percent stake in CE-CWEC. Two minority shareholders — the La Prairie Group and the San Lorenzo Ruiz Builders and Developers Group, Inc. each has a maximum share of 15 percent. In 1998, after purchasing all of San Lorenzo's share, the US-based MidAmerican Energy Holdings Company to which California Energy belongs, had 100 percent ownership of CE-CWEC.<sup>18</sup>

One contract involves that of NIA with CE-CWEC while another binds the NPC to purchase Casecnan electricity from NIA. "Take-or-pay" provisions compel NIA to guarantee annual payments to CE-CWEC over a 20-year period, whether or not the company fulfills its 802 million cubic meters/year delivery target. NIA also agreed to buy 19 million kWh from CE-Casecnan at a price set in dollars. NIA subsequently forged another deal with NPC, with the latter agreeing to purchase at a higher price (also quoted in hard currency) the 19 million kWh from NIA.

For these commitments, NIA will be paying \$72.7 million a year regardless whether the contracted volume of water reaches the Pantabangan Dam; NPC on the other hand (through NIA) will be shelling out \$36.4 million a year regardless of the level of electric power actually generated each month. Total project costs have recently escalated due to foreign exchange adjustments, jacking up the original contract price to \$650 million. So ridden with other irregularities is CMIPP that Sen. Joker Arroyo, chair of the Blue Ribbon Committee commented on the very first day of senate hearings: "All conceivable anomalies could be found in this single contract." 20

The very beginnings of CMIPP have been put to question because of President Ramos' close association with retired Brig. Gen. Donald M. O'Shei Jr., a key officer of California Energy. Ramos would later issue no less than three memoranda to the ICC, instructing them to fast-track California Energy's unsolicited proposal.

This leads to questions on the nature of the proposal itself – an unsolicited project – and casts doubt on government claims that a call for investors had been issued starting 1993. This would mean that government did not single out the Casecnan project as a priority and therefore,

would not have called potential investors into a bidding process. It is because of the absence of any bidding exercise that the amended BOT Law and its Implementing Rules and Regulations probihits the granting of direct subsidies or government.<sup>21</sup>

Conveniently, this did not apply to CMIPP because the Department of Justice, whose opinion the ICC asked on the matter, chose not to address the undertaking itself but only the budgetary support that the agency would need to be able "...to comply with its undertaking to pay water delivery fees."<sup>22</sup>

Tax provisions in the CMIPP contract have provided yet another area of great controversy. CE Casecnan claims that it had paid \$51.49 million worth of tax payments from 1995 to 2001. Based on the contract's formula for computing tax reimbursements at a staggering 48 percent internal rate of return, government would have to shell out \$878.74 million in 20 years. And even if government succeeded in negotiating a 17.93 percent rate (based on the BOT law benchmark), it would still need \$131.65 million as upfront payment for CE Casecnan's tax advances<sup>23</sup> or pay for higher water delivery fees as stipulated in the contract.

Other than ensuring foreign investors tax breaks and revenues in hard currency for exorbitantly priced power and water, these guarantees have exposed the Philippine government to great uncontrollable risk which includes, among others, hydrological factors, insufficient demand and exchange rate fluctuations.<sup>24</sup> Under the terms of the CMIPP contract, the Ramos administration assumed all these risks, which the private investors were predictably unwilling to share.

Hydrological factors are particularly relevant to the targeted volume of water to be delivered to Pantabangan Dam each year, and consequently, the promised level of power that this water flow is supposed to produce. "Stream flow patterns vary greatly over time and depend on factors which are difficult to predict such as rainfall and temperature patterns and watershed land use changes," writes Peter Bosshard. A look at the Environmental Impact Statement (EIS) of CMIPP reveals that it used Nueva Vizcaya's climatological data in various places, from more than two decades ago (at the time construction began), indicating little regard for the possible effects of global warming on rainfall, through time, and the obvious dire consequences on adequate river water levels, which is a hydropower plant's most critical resource. The trending of river flows that

could justifiably back up projections has also been ruled out because the data utilized mostly spans a period less than 10 years. <sup>26</sup>

The inability of CMIPP to deliver has been attributed by David Baldwin, president of a major player in the Casecnan consortium, California Energy International, to extremely dry season in the first half of the year 2002.<sup>27</sup> Government has to pay nonetheless, having assumed costs that are literally as unpredictable as the weather.

Engr. Edgardo Sabado of the Provincial Planning and Development Office of Nueva Vizcaya had doubted the viability of the project from the very beginning because of the state of the Casecnan and Taan Rivers, and he has been proven right. CMIPP is already diverting up to 90 percent of the two rivers contrary to Environmental Impact Assessment reports that it would require only 10 percent.<sup>28</sup>

A study of the Environmental Impact Statement of the NIA (completed in January 1995) has furthermore been scored by the Freedom from Debt Coalition research for identifying only the areas where the diversion weirs have been erected, as the Primary Impact Zone (PIZ).<sup>29</sup> Consequently, mitigating measures proposed in the EIS are limited to addressing the socio-economic and environmental vulnerabilities of predominantly Bugkalot sites and name the Bugkalot as the primary beneficiaries when non-Bugkalot populations at the exit tunnels would equally be affected by the project's environmental impacts.<sup>30</sup>

"The Company was able to secure a highly limited ECC that did not take full account of the impact of the project on farming communities in the host and neighboring areas...," Pascual and Macling noted. "The area where the exit tunnel was to emerge and find its way to the Pantabangan reservoir was identified as a secondary impact area, although water was to be badly affected by the chemicals used by the company during tunnel boring and construction." 31

Curiously, the ECC signed by then Secretary Angel C. Alcala that was granted to CE Casecnan on 28 April 1995, relegated the development of a watershed management plan, a vital pre-construction activity, to NIA and not to the more relevant agency, the DENR. To wit:<sup>32</sup>

#### 2. Pre-Construction Phase

- 2.1 The NIA will provide the EMB [Environmental Management Bureau] the following documents within sixty (60) days after receipt of this ECC for approval by this office:
  - 2.1.1 A detailed plan containing riverbank and mountain side slope protection/stabilization measures;
  - 2.1.2 A detailed Watershed Management Plan for Casecnan watershed and an improved management programme for Pantabangan watershed;

In addition.

3. NIA shall create an Environmental Unit within sixty (60) days after receipt of the ECC.

#### Other claims debunked

Vigorous local opposition to the proposed hydropower project in the early 90s and the sudden turnaround in 1995 is certainly a matter for further inquiry. The 10 July 1995 regular session of the Sangguniang Panlalawigan of Nueva Vizcaya resolved on "changing the stand...on the Casecnan Multipurpose Irrigation Power Project from emphatic 'no' to conditional 'yes'...<sup>33</sup> A package of other claims from CE Casecnan towards mitigating socio-economic impacts and environmental impacts in the PIZ accompanied this move:<sup>34</sup>

- Implementing social support measures through the interagency Casecnan Social Measures Task Force (CSMTF) led by the Department of Agriculture. To name some of the benefits extended to indigenous Bugkalot communities in areas identified as primary impact zones
- > health and day-care centers, setting up of Botika sa Tribu
- > educational assistance for 120 college students
- > credit assistance for livelihood projects
- livestock dispersal program
- issuance of ancestral domain claims in Nueva Vizcaya, Quirino and Aurora
- > community electrification
- > citrus and orchard plantations and seedling distribution

CSMTF pledged "to assist the native Bugkalots develop self-reliance and progressive watershed communities engaged in a variety of economically viable enterprises while adopting environment-friendly methods of economic pursuits." 35

The field visit that the Freedom from Debt Coalition conducted in 2002 in the PIZ found a starkly different picture: the citrus project office had been abandoned, its records in disarray. It was also commonly reported that the Bugkalot Association of Casecnan, which CE Casecnan financed and put up in coordination with local leaders to establish and oversee five cooperatives, had succumbed to corruption and discord among the Bugkalot and non-Bugkalot alike. The team spotted at least two sites in the area, equipped with wood finishing tools and stacked with foot-wide narra boards and other mouldings.

This seemed an ironic end to the letter written by overall chieftain Bugkalot Salvador Molina on 7 July 1995 to the chairman of the Regional Development Council of Cagayan, saying: "We wish to officially inform you that the Bugkalot Confederation of Aurora, Nueva Vizcaya and Quirino provinces which I represent have agreed to support NIA's Modifiled Transbasin Scheme in Casecnan. We are now working closely with NIA for the implementation of a development project for the five barangays in the project site. We want these five barangays to be self-reliant and progressive communities in four years because they will form the nucleus of our movement to establish a Bugkalot municipality in Central Casecnan in the near future." Despite the identification of the Bugkalot as the primary beneficiaries over other non-Bugkalot residents suffering the same payoffs triggered by the Casecnan project, the recognition of their land tenurial rights by the government apparently went only as far as securing their permission to be able to locate CMIPP's critical intake weirs in traditionally Bugkalot occupied areas.

..."[T]hese cooperatives and doleouts were doomed to fail as they were undertaken primarily to win community support for the project, without adequate mechanisms in place to ensure the cooperatives' sustainability," wrote Macli-ing and Pascual in the Freedom from Debt Coalition research.

#### The Controversial Casecnan Project

Despite the drum-beating by government and CE-Casecnan, it thus remains uncertain whether the promised benefits will ever be realized. Many of these like the scholarships and other safety nets intended to make

up for socio-economic dislocations, have already been discontinued. CE Casecnan's other claims are also doubtful, considering that most of them are premised on the actual delivery of 802 million cubic meters of water to the Pantabangan Reservoir.

#### Through These Lenses, Clearly

#### Women and the environment as criteria of analysis in appraising development

In the current campaign for economic neoliberal globalization, national borders are increasingly being swept aside to break down all restrictions to the market and to trade. Gita Sen and Caren Grown describe it thus:

It is well known that in many Third World countries, national economic plans are often no more than a collection of bilateral and multilateral aid projects supervised by donor agencies. These agencies therefore exercise considerable leverage over actual economic policy...<sup>37</sup>

The industrialized countries, northern governments and banks, international financial institutions, donor agencies, and the like stand at the helm of this remorseless drive that has markedly eroded the government's decision-making and regulatory powers and responsibilities. *Le Monde Diplomatique* explains it thus:

Globalisation is institutionalising a new balance of power between states that hardens the sovereignty of some while reducing the autonomy of others...The players with knowledge and power lay down the rules; and the others fall into line.<sup>38</sup>

Predictably, the loudest and most influential voices in development organizations and processes do not belong to the beneficiaries whose lives development projects are supposed to improve.

Facilitating these scheme of things are the very methods employed by official proponents and implementers. Virtually, the whole process from project identification, strategizing/planning and implementation proceeds with a top-down approach and along lines set by a handful of mutually reinforcing international and local enclaves wielding far-reaching economic and political power and influence. The outcome is predictable:

development programs aimed at improving people's lives threatens, in the final analysis, their very survival.

Defined by their terms and without benefit of people's experiences and issues on the ground, development is bound to render lip service to its professed claims or worse, aggravate people's problems and consign them to conditions worse than before. Development projects do not reflect any serious consideration of the differentiated impacts they may have on women and men. Consequently, the specific multi-layered oppressions that women in particular have to bear, especially in the wake of environmental degradation, pass unnoticed and unresolved.

For Sen and Grown, the only way to have a fair and incisive assessment of development programs and projects targeting the world's majority of underdeveloped countries is to see it from the eyes of poor women. Two reasons relevant to this paper are as follows:

- a) because development aims to improve standards of living, reduce poverty and inequality, etc., it is only logical that inquiry and study starts from the viewpoint of women who after all comprise the poorest and most economically and socially marginalized section of society;
- women's work, invisible and unaccounted for, is key to the sustenance and maintenance of communities. From child-bearing to food production (not to mention their direct participation in production work), the whole process of socially reproducing life itself hinges on women's labor.

On short notice, the author came up with a very raw instrument to draw out the particularity of CMIPP's impacts on women. Other members of the FDC research team also used this guide during the October field visit:

	Division of Labor		Employment		Income		Access to natural and material resources	
	Male	Female	Male	Female	Male	Female	Male	Female
Pre-project								
During Construction								
After project construction								

## Contextualizing the oppression of women in poor, underdeveloped countries

The lack of inputs from the "vantage point of poor women" in planning and implementing development programs has been all too evident in the hegemonic discourse on development dominated by the North. One response has been to push for women's integration in the process. But feminists have pointed out that this misses the point. In fact, it is actually women's "...enforced but asymmetric participation in it, by which they bore the costs but were excluded from the benefits..." that is to blame, asserts philosopher and physicist Vandana Shiva.<sup>39</sup>

What is the context of this participation? As earlier noted, the development experience occurs in a certain context among poor, disadvantaged women, alongside other large oppressed, disempowered and marginalized sections of the population. The particular historical context of a poor, underdeveloped country like the Philippines is one of centuries of colonial subjugation that has placed it in "an unfavorable structural local in the international economy". On turn, it has never been able to build and muster its own strength with which to develop on its own terms and resist the whims of an international trade regime that is controlled by perhaps no more than eight industrialized capitalist countries. The vulnerability is not entirely borne of external pressures, but purposively nurtured by local elites — some well-entrenched from their collusion with colonial interests in the past, and some newly sprung after having been co-opted into the web of corporate-led economic globalization and enriching themselves through it.

This has created enabling environments for CMIPP, the San Roque Power Plant and other "development aggression" power and infrastructure projects to flourish. There is little accountability on the part of multinational corporations like California Energy or its parent company Mid-American Holdings upon whom dominant trade institutions like the World Trade Organization have bestowed as much rights as individuals and allowed them to encroach well beyond national borders.

With the growing push for privatization in the global economy, two things immediately become apparent. One, with an automatic appropriations law in place, payments for new loans that government will incur to back up its sovereign guarantees will again eat up precious resources from basic social services. Two, as government relinquishes more of its social

commitments to the private sector, it is assumed that women will take on the responsibility of providing these. Already, women are shouldering the costs of government's warped sense of privatization that has resulted in meager budgets for health, education, land reform and other services.

Structural Adjustment Policies (SAP) now euphemistically called Poverty Reduction Strategy Papers (PRSPs) form part of this environment that compels countries to open up to foreign investments and so-called "constructive engagement". The release of new loans dangled by the International Monetary Fund, the World Bank and the Asian Development Bank are often contingent on the implementation of SAPs, and countries submitting to the pressure, usually acquiesce. Rising mass poverty worldwide proves just how constructive all these engagements have been.

The Philippine Privatization Law stands out as a mark of this acquiescence – ushering in \$6,603 million worth of long term Build-Operate-Transfer (BOT) Projects, the CMIPP excluded. Passed under the Aquino administration, the measure was strengthened by Ramos' 1995 New BOT Law, which showers investors with such extraordinary perks as protection from foreign exchange fluctuations, tax reimbursements, relaxed labor standards and guaranteed income (in dollars through take-or-pay agreements). Government has absorbed practically all risks that a private firm may encounter in the course of normal business operations.

# Impacts on women and the environment: surfacing the hidden costs of the Casecnan Project

From the outset, the government and CE Casecnan's only concern was securing the consent of the communities involved and failed to fully inform them of the consequences of CMIPP.<sup>41</sup> This was validated by this writer's own interviews conducted with affected communities in Brgys. Pelaway (site of the intake structures and named as the PIZ), and Pauan where the exit tunnel is located (secondary impact zone).

Learning that government could pour in \$46 million in 2001, for example, to reimburse CE-CWEC of its tax obligations yet fail to provide for a single functional health center for about 60 households in Pauan, was incomprehensible. Expressing regret, people were also dismayed at the significant lowering of water levels, the reduction of fish harvests and the marked scarcity of wild animals that used to abound in the area and supplemented their livelihoods.

Most of Casecnan and Taan's waters now pour into CMIPP's diversions weirs. Loose mountain rock dug out by tunnel boring machines have been dumped along river banks while the clearing of significant portions of the last virgin forests in this area of Northem Luzon continues unabated. As in many situations where socio-cultural, ecological and economic damage has been wrought by so-called development projects, women are made to pay dearly.

Vandana Shiva observed that "ecological ways of knowing nature are necessarily participatory". This resonates in the experiences of the women in Pauan who use the river for different purposes, from washing clothes and bathing to fishing and irrigating plots planted at various times to rice and onions. They knew by the large stones that lay dry and exposed in the river that water levels had gone down. With this development, so did they notice a decline in their daily harvests of various fish, small shrimps and crabs that used to fill salvaged scraps of old mosquito nets simply held against the current. Only *tilapia* is available these days, and not in large quantities.

They were not mistaken. Head tributaries of the Casecnan River, water flows of the Abaca and Denit rivers in the upland town of Alfonso Castaneda had reportedly been decreasing significantly since plant operations started in 2001 because water was allegedly being channeled to CMIPP. The company had assured the governor that only water from the Casecnan and Taan rivers would be diverted through the two weirs in Bgy. Pelaway and that the two other rivers would not be affected. The alarming news could also forebode ill for small springs and brooks downstream, particularly in Quirino province.<sup>43</sup>

The women also recalled that during construction, the river turned grayish and those who dared bathe in it, suffered skin allergies marked by small, itchy boils (butlig). This was only one of their health problems, however. Alfonso Castañeda had been upgraded into a first class municipality sometime in 2000-2001 because of the local government's much larger income owing to taxes of CE Casecnan but it has never addressed urgent calls for a health unit to be set up in the barangay. Neither was CE Casecnan's 1999 promised delivery of health services forthcoming. There are no reproductive services to speak of.

Very few women in Pauan were hired by CE Casecnan; those who found employment worked as secretaries, clerks, health workers and the like. Most of the women were left to tend the household as well as small fields averaging one-half hectare. Their stories speak for themselves.

Luz Mantile, 35, would rise before daybreak to cook meals and prepare her children for school. By 7:00 a.m., from Monday through Saturday, her husband had to be at the construction site where he worked as a truck layer until 7:00 in the evening. Leaving the younger children with relatives, Luz then left to supervise their ricefield (wet season) or onion planting (dry season), returning home briefly before noontime to cook and check up on the children. She would then go back to the field and work there until five in the afternoon. This, she did almost daily in 2001 until the ninth month of her pregnancy.<sup>44</sup>

During the entire construction period from 1995 to 2000, onions were stricken with blight and prices plunged from Php 31-37 to Php 8 per kilo.<sup>45</sup> Only in 2002 when construction finally ended did harvests improve. Often the only choice open to women was to patronize usurers who would charge 10-15 percent monthly. "Talagang lulubog ka sa utang," she said. "Hindi maiwasan."

Susan Verticulo,32, took on the same routine during the five years her husband worked with the company, leaving the care of the household to her oldest 14-year old child. Planting cycles were delayed several times while construction was ongoing. At its worst, the blight on the onions caused a steep drop in harvests from 100 to 25 kilos. Longer hours also had to be spent in the field because of ensuing irrigation problems. "Dahil lumiit ang ilog, nag-uunahan sa patubig," she recounted. "Inaabot kami ng alas-siyete ng gabi. Minsan sumusunod ang mga bata at kapag napagod natutulog na lang sa pilapil."

The loose gravel that CE Casecnan dumped along river banks and fenced with grass borders, had began to erode and invaded a number of ricelands. The stones have to be picked up one by one before fields can be suitably cultivated. "Mangingitim and dulo ng daliri mo sa kapupulot ng bato," said Susan's sister Yoly Bustamante.

Just enough money was saved while her husband was employed to build a modest concrete bungalow, but Susan speaks with resigned bitterness that they were better off before CE Casecnan came to Pauan. She still hopes for a remedy to an unexplainable skin affliction that her husband Romy sustained at the CMIPP construction site when some quickdrying cement treated with a chemical commonly called *seca* by company workers, was accidentally spilled on his face sometime in 2000.

Romy was not one of those fortunate enough to have been issued protective clothing by the company. The 1995 EIS certified that no hazardous or toxic materials or chemicals onsite would be allowed. Romy could not recall any warning issued by the company on the dangers of skin contact with seca. The two areas of exposed raw flesh on his chin and brow that started out as one-centimeter burns are spreading. The company clinic then had no clear diagnosis to offer, prescribing no more than antibiotics and ordinary painkillers.

Aside from her work at home, Susan also helps her husband maintain the *kaingin* (about an hour's walk away) which they have planted to various root crops (*kamoteng kahoy, kamoteng baging*), fruit trees (*langka, guyabano*) some beans and bananas. Still this is not enough and she and her children also have to engage in gathering rattan, which has grown much scarcer through the years. *Maghapon*, is how she described the time needed to go deep into the woods and collect about Php 250 worth of rattan (50 canes sell for Php15 in the town of Rizal). The meager profits hardly compensate for the effort: Php 80 goes to transportation and Php 20 to foodstuff and other expenses along the way.

In October 2001, Divina Mariano, 34, mother of five, was gathering firewood and foraging in the vicinity of the project site for some scrap metal to sell when a steel beam carelessly loaded unto one of CE Casecnan's trucks fell and sliced away part of her scalp. The company did not offer its ambulance to rush her to the hospital; luckily the barangay's service vehicle was around. A week after she was discharged, she was still waiting for the Php 4,000 needed to buy the medicines prescribed for her recuperation. Only when the barangay set up a barricade in the lone serviceable road leading to the project area did CE Casecnan relent.

Divina's husband worked with the company for only a year. Their livelihood is now mainly dependent on slash-and-burn farming and rattan gathering. When more hands are needed in the *kaingin*, she and her older children leave the younger siblings to other family members. Her 16-year old eldest son no longer goes to school, helping out instead in supplementing the family income by gathering rattan in the forest.

Leveta Kedatan, a shy 36-year old Bugkalot mother of nine, views the road built by CE Casecnan with mixed feelings. The author eventually managed to engage her in a conversation at a small sari-sari- store in Pelaway, finding out that she and her youngest child, whom she had bundled

in a blanket slung from her shoulder, had just covered an hour's walk (by her own reckoning) from her home farther up north in Bgy. Cawayan. True, she said, the walk to Pelaway, has been made much shorter, but the poverty ("napakahirap ng buhay") and the hunger have grown deeper too. It was all the blasting during the road construction and the dirt in the river, she added, that drove the fish, the wild boars and deer away. No one can afford bangus (milkfish) at Php120/kilo and pork at Php130/kilo being sold at the market in Pelaway. During really hard times, she still has no choice but to make the journey to Pelaway and sell saba at Php1 each.

Angelita Ebenga, 38, another Bugkalot woman wishes for quieter days in Pelaway when *videoke*, gambling and drinking was unheard of. The road brought all these to her village and in the end exacted more in return. While washing clothes at twilight (the only time she had left that day, she explained to the author), Angelita remembered: "Dati hindi na kami bumibili ng isda. May pana ka lang o bingwit o kaprasong kulambo, makakahuli na kami ng hipon, banak, kandule, biya, palos, tilapia... Ngayon maliliit na at kakaunti ang mga isda."

Further dangers to the environment have grown more insidious, having taken root within the local communities and cultures, and no longer as easily apparent as the outright damage CMIPP's construction has inflicted on the environment. With alternative livelihood sources eroded by CMIPP, the illegal logging of *narra* (teak) has intensified among the Bugkalot, for instance, whose leaders have fallen prey to CE Casecnan's aggressive drive of cooptation.

Surprisingly, the trucks transporting the cut hardwood passed undisturbed through various checkpoints of CE Casecnan, the DENR and a local police detachment. One resident reportedly spotted a truckload of narra driving by the DENR sub-office in Brgy. Talbec that was eventually tailed by a DENR employee on a motorcycle. The resident was allegedly told that the employee had asked for the usual Php 5,000 bribe.<sup>48</sup>

#### Conclusion

The particular experience of the women in Pauan and Pelaway mirrors just how government – in acquiescing to development projects aggressively pushed by foreign big business and Northern states – can be oblivious to the way its policies and programs impact on the particular conditions of women.

For one, something must be said about the main role particularly of the women in Pauan who singlehandedly sustained the agricultural production of their village while husbands, brothers, sons worked at the CMIPP construction site. Their principal involvement in agricultural production, however, did not translate to some degree of financial independence or an increased mobility, as compared to women exploited for their cheap labor and "nimble fingers" in industrial zones. Thus, even when women took charge of producing rice and onions, the final decision as to the disposal of revenues arising thereof was not in their hands.

Women comprise approximately 70 percent of the world's poor today, Jaggar reminds us, yet, trapped as they are "in a permanent condition of indentured servitude", their contributions to the world's economic production remain unbelievably concealed.<sup>49</sup>

Second, there seems to be no recognition of how closely intertwined the lives of women (especially rural women) are with the environment. The environmental degradation brought about by the Casecnan project was felt directly and acutely because this redounded to a lengthening of labor time in both production and social reproduction where the women actively participate. In both spheres, women had to expend more of their energy for longer periods of time because CMIPP had compromised river and soil resources that are vital to farms as well as natural sources of alternative livelihoods.

"With the destruction of forests, water and land, we are losing our life-support systems...The violence to nature, which seems intrinsic to the dominant development model, is also associated with violence to women who depend on nature for drawing sustenance for themselves, their families, their societies," wrote Vandana Shiva.<sup>50</sup>

And she concludes: "The displacement of women from productive activity by the expansion of development was rooted largely in the manner in which development projects appropriated or destroyed the natural resource base for the production of sustenance and survival. It destroyed women's productivity both by removing land, water and forests from their management and control, as well as through the ecological destruction of soil, water and vegetation systems so that nature's productivity and renewability were impaired...."51

In the distant mountain fastness of the Caraballo Mountain Range where women also personally live through the backlash of "development" through multiple days, multiple burdens, multiple shifts that are not measured and therefore, not recognized in the overall valuation of the country's productive economic life —Shiva's words ring clear and true.

#### Notes:

- 1 Thereafter referred to as CE Casecnan, CE-CWEC or the Casecnan Project.
- <sup>2</sup> National Irrigation Administration, Environmental Impact Statement for the Casecnan Multipurpose Irrigation Power Project, Final Report, Volume I, as certified by SGC Consulting, January 1995.
- <sup>3</sup> "CE announces commercial operations of the Casecnan Project, 14 December 2000 at <a href="https://www.calenergy.">www.calenergy.</a>
- 4 Worldwide projects factsheet, Casecnan (Philippines) at www.calenergy.
- <sup>5</sup> President Joseph Ejercito Estrada's Speech during a visit to CMIPP, Bgy. Villarica, Pantabangan, Nueva Ecija, 22 January 1999.
- Businessworld, 20 July 2001.
- 7 Ibid.
- <sup>8</sup> Senate Committee on Accountability of Public Officers and Investigations
- 9 President Estrada's Speech, 22 January 1999.
- <sup>10</sup> A consortium of California energy International Limited, San Lorenxo Ruiz Builders and Developers Group, Inc. and the La Prairie Group of Contractors International, an earth-moving and construction firm.
- 11 CMIPP Project Report, NIA, Nueva Ecija, undated.
- <sup>12</sup> National Irrigation Administration, Environmental Impact Statement for the Casecnan Multipurpose Irrigation Power Project, Final Report, Volume I, January 1995.
- 13 CMIPP Project Report.
- 14 DENR.
- <sup>15</sup> Maria Teresa Diokno-Pascual and Shalom MK Macli-ing, *The Controversial Casecnan Project*, Freedom from Debt Coalition, August 2002.
- 10 CMIPP Project Report.
- <sup>17</sup> California energy has three existing BOT contracts with the PNOC for the Leyte Geothermal Plant.
- 18 Pascual and Macli-ing, August 2002.
- 19 Ibid.
- <sup>20</sup> Danao, Efren. "Joker: All kinds of Anomalies found in Casecnan Contract." *The Philippine Star.* Posted 9 August 2002 at http://www.gatewayphil.com.
- <sup>21</sup> Pascual and Macli-ing, August 2002.
- 22 Ibid.
- <sup>23</sup> Nacpil, Lidy. "Why the Casecnan contract should be cancelled." Letters to the Editor. Posted 1 September 2002 at <a href="https://www.inq7.net">www.inq7.net</a>.
- <sup>24</sup> Bosshard, Peter. Private Gain Public Risk? The International Experience with Power Purchase Agreements of Private Power Projects. International Rivers Network, 20 November 2002.

- 25 Ibid.
- <sup>26</sup> National Irrigation Administration, Environmental Impact Statement for the Casecnan Multipurpose Irrigation Power Project, Final Report, Volume I, January 1995.
- <sup>27</sup> Danao, 9 August 2002.
- <sup>28</sup> Based on author's discussion with Engr. Edgardo Sabado, Planning Officer and Information Technology Office, Provincial Government of Nueva Vizcaya, 16 September 2002.
- <sup>29</sup> Pascual and Maeli-ing, August 2002.
- National Irrigation Administration, Environmental Impact Statement for the Casecnan Multipurpose Irrigation Power Project, Final Report, Volume I, January 1995.
- 31 Pascual and Macli-ing, August 2002.
- <sup>12</sup> Ibid.; Environmental Compliance Certificate, 28 April 1995.
- <sup>33</sup> Republic of the Philippines, Province of Nueva Vizcaya, Sangguniang Panlalawigan. Excerpt from the Minutes of the 2<sup>nd</sup> Regular Session of the Sangguniang Panlalawigan. 10 July, 1995.
- <sup>34</sup> It would necessitate separate study to investigate and expound fully on the fate of the Bugkalot the shadow of CMIPP, particularly their livelihoods, traditions and culture.
- <sup>35</sup> CMIPP Project Report. A separate paper may be needed to study the way CMIPP has created divisions among the Bugkalot and non-Bugkalots because of unequal access to project benefits and other so-called social security measures.
- <sup>36</sup> Bugkalot (Ilongot) Confederation of Aurora, Nueva Vizeaya and Quirino Provinces. Letterto the chair of the Regional Development Council 7 July 1995.
- <sup>37</sup> Gita Sen and Caren Grown, Development Crisis and Alternative Visions, New York, 1987.
- 38 The States we are in, Le Moude Diplomatique, April 2000.
- 39 Vandana Shiva, Staying Alive, UK, 1989, p. 2.
- 40 Sen and Grown, 1987.
- 41 Macli-ing and Pascual, 2002.
- <sup>42</sup> The author is part of the FDC research team looking into CMIPP. The interviews cited here were conducted from 11-16 September and 10-14 October 2002.
- <sup>43</sup> Gascon, Melvin. "Drying up of 2 Vizcaya rivers alarms governor." *Inquirer News Service*. Posted 22 January 2002 at <a href="http://www.inq7.net">http://www.inq7.net</a>.
- $^{\rm 44}$  From interviews conducted by the author with several women in Pauan during the September 2002 field visit.
- <sup>45</sup> This has not recovered, due this time to the influx of cheaper vegetable produce from other countries.
- National Irrigation Administration, Environmental Impact Statement for the Casecnan Multipurpose Irrigation Power Project, Final Report, Volume I, January 1995.
- <sup>47</sup> Shrimp, mullet, a variety of catfish, gobi fish, eel, adult leather jacket fish (From the NIA Environmental Impact Assessment, January 1995.
- 48 Basilio, Gene Basilio. "Bugkalot tribesmen in illegal logging, says barangay captain." The Mauila Times. Posted 8 July 2003 at http://news.vehev.com
- <sup>49</sup> Geoff McMaster, "Debt 'forgiveness' insults poor nations philosopher," *Express News*, 18 January 2002 at <a href="https://www.arts.ualberta.ca/womensstudies">www.arts.ualberta.ca/womensstudies</a>.
- 50 Shiva, , p. xvi.
- 51 Shiva, p. 3.

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