

Towards an Inclusive, Sustainable and Green Philippine Economy¹

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Abstract: *The neo-liberal framework, which has guided development in the Philippines for nearly four decades, has produced economic growth without creating enough jobs for the job seekers. With a stagnating industrial sector and a collapsing agricultural sector, growth has been fuelled mainly by the remittances of millions of overseas Filipino workers and immigrants. The sustainability of the economy is further threatened by an environmental crisis and climate change-induced calamities that have been occurring in the country with alarming frequency. To make the economy sustainable economically and environmentally, the author argues that the country has little choice but to embrace an inclusive, sustainable and green development framework. Inclusiveness means empowerment of the people through an all-out implementation of social and economic reforms such as agrarian reform. Greening means the renewal of the environment through reforestation, the development of green industries such as the renewables, and the greening of existing industries, turning “brown” technologies into more efficient ones and workers into environmental crusaders. All these necessitate an overhaul of the failed neo-liberal policy framework and adoption of an Industrial Policy that promotes green/greener industries and value-adding inter-sectoral linkages, technological and environmental innovations and skills upgrading.*

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1. Introduction

The paper takes off from two sad realities in the Philippines: 1) a job-less growth pattern in an economy with an eroding agricultural and industrial base; and 2) the extreme vulnerability of the country to climate change risks compounded by a badly degraded environment. The paper, therefore, urges a re-thinking of the country’s growth and development strategy in favour of one that promotes social inclusion, sustainable development and green economy

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in a coherent and integrated manner, as what the UN Environment Program (UNEP, 2011) has been advocating.

Is this development vision attainable? This paper argues that it is possible and that in fact, is the only policy choice in securing a sustainable and better future for the country. However, for such a vision requires boldness on the part of the national leadership and the citizenry in pushing for economic, social and environmental reforms and socio-economic change. This includes the overhaul of the existing economic model based on the neo-liberal economic belief that a policy of general economic openness automatically leads to growth and job creation.

The paper outlines some strategic “transition” reform measures needed to effect a green shift in a crisis-prone, brown and climate-change-vulnerable economy to generate inclusive, sustainable and green growth. Annex A describes how the past and present growth models have contributed to the degradation of the environment.

2. Jobless growth, degraded environment: rethinking the nation’s growth model

Why overhaul the nation’s development strategy? There are two compelling reasons: 1) the need to arrest a “jobless” and unsustainable growth pattern; and 2) the need to renew the environment and limit the risks associated with climate change.

i. On jobless and unsustainable growth pattern

A 2012 ADB study, *Taking the Right Road to Inclusive Growth: Industrial Upgrading and Diversification in the Philippines* (Usui, 2012), renewed the debate on the directions that the Philippine should take in the coming decade and beyond. According to the study, the Philippine’s economic growth, buoyed by the huge overseas migrant remittances and the tremendous expansion of the call centre/business process outsourcing (CC/BPO) sector, is unsustainable if the industrial sector remains stagnant. The share of manufacturing in employment went down from 11% in 1980 to about 9% in 2009; in contrast, the percentage in neighbouring Asian countries such as Indonesia and Thailand went up from single to double digits in the same period. Compared with Malaysia, the Asian NICs and China with the industrial performance of the Philippine is even more embarrassing. Though the CC/BPO sector has become a major growth driver, its total contribution to direct job generation is just a little over 1% of the total labor force.

The above finding of the ADB on “stagnant industrialization” is not new, especially to progressive civil society organisations in the Philippines. They are also likely to find the ADB study somewhat incomplete in its diagnosis

of the weaknesses of the economy. Bello (2004) and the Fair Trade Alliance (2006) pointed out that the de-industrialization of the Philippine in the last three decades has been accompanied by de-agricultural development - reaffirmed by the above-cited ADB study (see Table 1 on sectoral distribution of output and employment).

Table 1: Sectoral Composition of Economy, Output and Employment (percentage, 1980 and 2009)

Sector	1980	2009
Output Share		
Agriculture	25.1	13.1
Industry	38.8	31.7
<i>of which Manufacturing</i>	25.7	21.3
Services	34.3	55.2
Employment Share		
Agriculture	51.8	35.2
Industry	15.4	14.5
<i>of which Manufacturing</i>	10.8	8.9
Services	32.8	50.3

Source: Extracted from Table 2-1 of Norio Usui, ADB, 2012.

The country, a net agricultural exporting country in the 19th and 20th centuries, has become a net agricultural importing country since 1995, the first year of its membership in the World Trade Organization (WTO). The Philippines has, in fact, become the world's biggest importer of rice. The nation's success in the production and export of banana and pineapple cannot make up for the country's failure in attaining self-sufficiency in staple crops (rice and corn), fishery and meat products, and in stabilising the market for coconut, sugar, tobacco, vegetables, rubber and other crops.

On industrialisation, the country's manufacturing was hailed in the early 1960s by the World Bank as Asia's most dynamic, second only to Japan (Ofreneo, 1993). However, as attested by the above three studies, the Philippines industrial dynamism disappeared during the last three decades, beginning from the 1980s. The latter period happen to be the decades of "structural adjustment program" (SAP) promoted by the economic technocracy in the name of export orientation and national competitiveness. This explains why the original programme of "temporary manpower export"² has become permanent and grown year by year. Today, the remittances of close to 10 million OFWs (Overseas Filipino Workers) and Filipino immigrants, which equals to 10% of the population, provide the critical lifeline to at least a fifth of the population. The remittances, estimated to be over US\$20 billion a year, explain why the economy is described as a "consumption-led" one despite the precipitous decline in domestic manufacturing, agricultural production and employment.

In short, the Philippines has become a services-led economy without going through an industrial revolution and agricultural modernisation. Both

the industrial and agricultural sectors have stagnated. It is the services sector — both its formal and informal sub-sector sides — that has been growing. The growth of the formal sub-sector of services, from the 1980s to the present, has been fuelled mainly by the remittances of the OFWs and the “overseas Filipinos” — permanent immigrants who maintain close ties to home. In recent years, this OFW-consumption-led growth has been reinforced by the earnings of the vibrant CC/BPO sector.

Not all Filipino families have relatives working overseas or educated family members working in the CC/BPO sector and other service industries such as banking, real estate and so on. As a result, official data on unemployment, underemployment, poverty and inequality present a dismal picture of the labour market. Most of the employed workers — over two-thirds of them — are in the informal sector where jobs are precarious or with poor working conditions. In a way, the Philippines is a one-third society, because the other two-thirds literally live on the economic, social and political margins.

ii. On the degraded environment and climate change vulnerabilities

Aside from the jobless, industry-less and agriculture-less growth, the Philippines is facing other formidable development challenges. Foremost among these are the two deadly intertwining environmental threats—general environmental degradation and climate change (CC) risks. The first means declining quality of environment and life for all, especially for the poor; the latter means increasing vulnerability of the country to disasters such as floods, droughts and landslides triggered by extremes in weather changes, with the poor suffering the most.

On CC risks, the Philippines is in the short list of the five most vulnerable countries (Cruz, 2010). And yet, ironically, the archipelago of 7,000-plus islands is a low emitter of greenhouse gas (GHG) or carbon dioxide (Table 2).

Table 2: GHG Emission Share vs Selected Countries, 2004

Country	Global Share	Per Capita
United States	20.9	20.6
China	17.3	3.8
Russia	5.3	10.6
India	4.6	1.2
Japan	4.3	9.9
Germany	2.8	9.8
South Korea	1.6	9.7
Singapore	0.2	12.3
Philippines (Phl)	0.3	1.0

Source: UNDP, Human Development Report 2007/2008 – Fighting Climate Change: Human Solidarity in a Divided World, 2007

There is rising national awareness on the CC-related risks to the devastating typhoons and droughts experienced by the country each year. In September-October 2009, two powerful storms (“Ondoy” and “Pepeng”) inundated more

than half of Luzon, including Metro Manila, for several days. In December 2011, thousands (exact number has never established) died when typhoon “Sendong” washed out whole villages in two cities of northern Mindanao,³ Cagayan de Oro and Iligan. These storms are an eye-opener to the public for they have fully bared the extreme vulnerabilities of the Philippines to the risks associated with climate change and with the general degradation of the environment. The CC phenomenon is blamed for the ferocity of these storms, while the degraded environment (due to limited forest cover, eroded watersheds, silted river systems, illegal logging and irresponsible mining) is routinely cited as the reason for the sudden swelling and slow recession of the devastating floods.

In this context, one environmental policy debate in the past revolved around the issue of which should be given importance: Mitigation (GHG emission reduction) or adaptation (anticipating and adjusting to CC risks)? Today, it is abundantly clear that both should be given importance. Also, mitigation and adaptation programmes in relation to CC should go hand in hand with the tasks of rebuilding the environment (e.g., reforestation, community renewal, mangrove replanting/rehabilitation, dredging of waterways, etc.) and enforcing all environmental laws with decisiveness and consistency.

It is always the poor — the numerous poor — who bear the brunt of the CC and environmental disasters. They live in houses made of cardboard and poor quality housing materials; they are also located in congested, hazardous and unprotected areas. Moreover, their livelihoods are severely affected because these are generally marginal economic activities in the large but unprotected informal economy. And yet, because of poverty, the poor also aggravate the dire environmental situation in the country with their survival-coping economic activities such as poaching forest trees, engaging in small-scale mining using mercury, blocking waterways by building illegal structures and overfishing in overfished coastal areas among others.

Various environmental organisations including the national Department of Environment and Natural Resources (DENR), have amply documented how degraded the environment is. Chapter 10 of the Philippine Development Plan 2011-2016 (NEDA, 2011) has a fairly comprehensive list of environmental problems facing the country. The list includes the following: water pollution (up to 58% of Metro Manila’s ground water is contaminated with coliform), solid waste disposal (only up to 70% of garbage is collected regularly in the metropolis), diminished watersheds (as many as 267 requiring rehabilitation), endangered biodiversity (the Philippines’ is the most threatened in the world), degraded coral reefs (only 5% out of 27,000 square kilometers in excellent condition), exhausted mangroves (140,000 hectares remaining in 2008 compared with 450,000 in 1918), and reduced forest lands (only 19% of the total land area of 30 million hectares are considered forested as at 2007). On deforestation,

Annex A presents more alarming figures based on an independent study by an environmental institute in the Ateneo University. From the foregoing, it is clear that a development programme should and must focus on economic and environmental sustainability.

3. Towards an Inclusive, Sustainable and Green Country: A Development Programme for Philippines

How can the pattern of growth and development — industry-less, agriculture-less, jobless, environmentally-degrading and CC-risk-prone — which came to define the Philippines be reversed? The country clearly cannot afford to stay where it is, or do things as usual, without instituting bold changes in the general economic and environmental policy directions.

It is against this backdrop that this paper proposes the formulation of a development framework that seeks to promote an inclusive, sustainable and green (ISG) growth trajectory for the Philippines. Why ISG? Inclusive growth means a development framework that allows majority of the people to become active participants in the development process and rise above poverty and misery through greater access to quality jobs and sustainable incomes. Sustainable growth means continuous, upward and “widening” growth of the economy. Green means growth that respects, renews and nurtures the environment.

In a way, the ISG framework concept is not new. Almost all international development institutions and government agencies talk about the challenge of fostering inclusive, sustainable and green growth, at least at the level of rhetoric. The devil is really in the design and operationalisation of the ISG framework.

Starting point: Broaden the “green economy” and “green job” concepts

This article reviews the concepts of “green economy” and “green jobs” that have been popularised by the UNEP, International Labor Organization (ILO) and other UN bodies, for, as they assert, the “greening” of the economy should lead to inclusive and sustainable growth. The UNEP defines a green economy as follows:

“...one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. In its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive.” (UNEP, *Towards a Green Economy*, 2011, p. 2).

Following this definition, the ILO, UNEP, International Organization of Employers (IOE) and the International Trade Union Council (ITUC) have jointly endorsed a global report by a research team from the Cornell University

entitled *Green Jobs: Towards decent work in a sustainable, low-carbon world* (2008). The report defines green jobs as:

“positions in agriculture, manufacturing, construction, installation, and maintenance, as well as scientific and technical, administrative, and service-related activities, that contribute substantially to preserving or restoring environmental quality.” (pp. 35-36)

Additionally, the report pointed out that green jobs “also need to be good jobs that meet long-standing demands and goals of the labor movement, i.e., adequate wages, safe working conditions, and worker rights, including the right to organize labor unions.” The ideal is to have jobs that are both green and decent, for example, well-paid environmental and technical jobs in an unionised geothermal plant. The ILO green job battle-cry is “green but decent”.

The above definitions of “green economy” and “green jobs” are clearly mitigation-focused, meaning they are targeted at the “green segments” of the economy that are being promoted to reduce GHG emission, sequester carbon and recycle materials. These include the following often-cited examples:

- **Energy supply** – greater reliance on clean energy or renewables (e.g., solar, wind, geothermal, etc.);
- **Transport** – production and use of fuel-efficient vehicles;
- **Manufacturing** – adoption of clean production techniques;
- **Building** – designing buildings that are energy-efficient;
- Recycling of materials;
- **Distribution** – eco-labeling of products;
- **Agriculture** – shift to organic farming; and
- **Forestry** – reforestation.

In the Philippines, the government, private sector and civil society organisations (CSOs) have a number of initiatives or projects related to the above green segments of the economy. They include the intensified geothermal development, introduction of experimental e-jeepneys and e-trikes (powered by electric batteries) in select cities; adoption of cleaner production processes in the subsidiaries of some multinationals (for example, the Philippine Toyota car assembly follows the Toyota Tokyo’s “Earth” guidelines); the “green building” promotion programme by environmentally-conscious architects; plastic recycling; solid waste treatment facility (the Payatas project in Quezon City is aided by an Italian company, which gets carbon credits under the UN’s Clean Development Mechanism); a law promoting organic farming; and a “National Greening” reforestation programme (with the President even reaffirming the country’s total log ban policy in the wake of the Sendong tragedies in Mindanao).

These initiatives taken together still constitute a miniscule part of the economy with limited impact on the general environment. For example, despite the new supporting law, organic farming accounts for less than 2% of the country's total farming land (Manalang et al., 2011). On the positive side, the share of clean energy in the power supply is growing, with geothermal accounting for a fifth of the country's total power supply and hydro about 10%.

The concepts or definitions of "green economy" and "green jobs" tend to be narrow in application. They emphasise mitigation, which requires huge investment funds; as a result, adaptation projects tend to be relegated to the background in the discourse on green jobs. For example, is the rebuilding of the communities of urban and rural poor in the uplands, lowlands and coastal areas to make them resilient to CC risks not central in the development of the green economy? Can the workers mobilised for this rebuilding programme not be considered green job holders? And how about the professionals, technicians and ordinary workers in the non-green segments of the economy who come up with green or greener solutions such as reducing energy use in "brownish" offices, factories, farms and other establishments?

Moreover, even in the green segments of the economy, the ILO-UNEP definition of green job holders tends to limit the concept to environmental professionals and technicians. The role of ordinary workers within the green enterprises is not mentioned. And yet, in the case studies of successful green companies in the Philippines (by the author), all workers are transformed into committed advocates of the environment because greening is not the work of environmental department of a company alone but its entire work force.⁴ This is why at San Carlos Bio-Ethanol, the human resource management (HRM) programme has a green dimension for all workers at varying levels, with the green professionals having the maximum greening responsibility while the ordinary non-environmental workers are given compulsory basic orientation on environmentalism and how their work contributes to the overall environmental mission of the company. A successful green transformation of a company requires the full commitment of all — from the CEO down to the lowest rungs of the personnel hierarchy. Separating the professional green workers as a class of "green job" holders while ignoring the role of the "others" in the greening processes, whether the company is green or brown, is not helpful or even useful from an HRM point of view, as well as from the perspective of green enterprise development in general. The challenge is not on the number of green workers for the urgent task is how to green all jobs and creating as many jobs out of the growing green industries while greening all brown industries.

Everyone in the Philippines should be involved in the battle to green all areas of the economy, reduce CC vulnerabilities and renew the environment. The idea of an elite group of "green" workers in select green segments of the economy doing the world a favour sounds heroic and romantic; however, it is

not helpful in mobilising the entire work force behind the greening process. As Director Cynthia Cruz of the Institute of Labor Studies wrote in 2009 in her pioneering study on green jobs and green “transition” measures, all jobs eventually have to become green because the overall development task is to develop a truly green economy.

Fortunately, more and more institutions are discussing the green economy and green job concepts in a broader context. For instance, the UN Industrial Development Organization (UNIDO) talks of the importance of industry greening in developing countries in a general way, arguing that inclusive and sustainable growth is possible while minimising the consumption of materials and energy (UNIDO, 2010). Together with UNEP, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), ILO, the DENR and a number of international private organisations, UNIDO launched the “Green Industry Initiative” in an international conference held in Manila in 2009. The Initiative asks both government and industry to adequately promote: low-carbon paths to industrial development; the efficient use of non-energy raw materials; the efficient use of recycled industrial and non-industrial wastes as a substitute for virgin raw materials; the adoption of relevant products and technologies to meet international commitments or environmental standards in global markets; the adoption of environmental and related management systems as a requirement for entry into global value chains; and the creation of businesses that can offer services in all these areas (UNIDO, *A Greener Footprint for Industry*, 2010, p. 20).

Some definitional adjustments of the concept of green jobs have been discussed within the ILO. For example, the ILO Skills and Employability Department and the European Center for the Development of Vocational Training (CEDEFOP) in their global synthesis report on “skills for green jobs” wrote:

‘Green jobs’ are defined as jobs that reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable. This definition covers work in agriculture, industry, services and administration that contributes to preserving or restoring the quality of the environment while also meeting the criteria for decent work—adequate wages, safe conditions, workers’ rights, social dialogue and social protection. It also covers activities related to both mitigation of and adaptation to climate change. This is a working definition. It implies in its inclusivity and breadth that every job can potentially become greener. As time goes on and the transition to a green economy intensifies, what is considered a green job today might not continue to be so regarded. The understanding of green jobs also varies from one country to another. Ultimately, countries will need to compose their own national definitions and set thresholds for practices considered green or non-green.” (Strietska-Ilina, O. Hofmann, C and Jeon, S, eds., 2011, p. 4, underscoring supplied)

The above definitions of the green economy and green jobs are broader, more encompassing, and more flexible. Moreover, activities related to CC “adaptation” are given equal importance to the “mitigation” activities. In a CC-vulnerable country like the Philippines, adaptation measures such as the fortification of dikes and clearing up of clogged waterways in coastal and low-lying villages are urgent and important. The above definitions also cover activities related to the greening of existing economic sectors stating that “every job can potentially become greener.” These broader concepts of the green economy and green jobs are important because they link the greening process to the large brownish economy. The point is that the challenge of greening the economy is broad-based or socially-inclusive, not an isolated project undertaken by a few green-minded professionals and technical people.

Strategising ISG framework in the context of the Philippine’s economic reality

Can greening and fostering socially-inclusive and sustainable growth go together? Is it a realistic formula for the Philippines? It is, especially if one examines the ISG applicability in each economic sector and on the economy as a whole.

In the Philippines, there is a stagnant industrial sector, a declining agricultural sector and a growing services sector. However, except for some “green shoots” (such as recycling, geothermal energy generation, organic farming, eco-tourism, etc.), all these sectors are generally brown or brownish. There are, of course, some “black” spots in the economy — the “economic activities” by some shady groups such as prostitution, gambling, smuggling, kidnapping, human trafficking, etc. The environmentally-degrading deforestation and harvesting of mangroves and corrals by irresponsible businessmen and desperate poor are also realities. This black economy requires a separate study.

What then are the ISG policy choices and ISG opportunities in the different sectors? This should be the subject of democratic and multi-stakeholder consultations in the country. The following can be included in these economic and social dialogues:

Reverse “stagnant industrialization” by upgrading and greening the industrial sector. As the ADB study put it, the country must reverse “stagnant industrialization” and restore “industrial dynamism”. The ADB proposal is straightforward — embrace an Industrial Policy to upgrade and diversify the industrial structure. Aside from the usual investment climate enhancement programme (fiscal incentives and so on), the ADB is asking the government to take an outright leadership role in identifying and pushing the private sector to go up in the higher rungs of industrialisation by focusing on what it calls higher “nearby products”, meaning products with additional technological inputs or

greater sophistication involving advanced skills and professional expertise. Additionally, the ADB calls for social dialogue with the private sector on how to climb up the industrial ladder.

The ADB proposal is classic Industrial Policy approach which is one way of reversing industrial stagnation and creating more jobs. This approach will also strengthen industrial peace, because going higher up means moving away from the traditional labour-intensive (but not necessarily job-intensive economy-wide) processes and the practice of short-term hiring,⁵ which fuel labour unrest (due to emphasis on wage and union restraint). Studies show that the cost of unskilled Philippine labour is higher compared with many Asian countries, but the cost of skilled and professional labour is generally competitive and reasonable. This is reflected in the massive recruitment of Filipino skilled workers (often poached) for the Asian and global labour market.

Overall, involving in higher value-added activities and going green are a good solution to the existing but uncompetitive low-end manufacturing. As advocated by this author and suggested by an ADB study, export-led electronics and auto assembly plants should evolve into producers of higher value-added products such as original equipment manufacturers (OEM) and producers of new industrial products. As to the local industrial producers, each should go into road-mapping on the higher road of production with the involvement of other stakeholders such as the academe and organised labour.⁶ There should be increased processing or industrialisation of agricultural products. Likewise, there should be value-adding and job-creating industrialisation of minerals, which should be extracted under strict environmental standards. The point is that the Philippines should get out of the rut of the failed labour-intensive, low-technology, low-skill and uncompetitive industrial production, which also contributes to environmental degradation.

Since most of the smokestack industries such as foundries and the dilapidated textile mills had already disappeared under SAP liberalisation, and since the Philippines has the highest cost of electricity in the region, any industrial upgrading is also likely to focus on energy-economising activity. This should be reinforced by government-private sector-cooperation in energy saving every step of the upgrading process. The government should also address the power issue with more decisiveness, because the high cost of power, much more than labour cost, is a major reason why the manufacturing sector has declined and has become uncompetitive in Asia.

Modernise agriculture by going organic. Greening the agriculture sector through ecologically sound farming methods such as organic, biodynamic, natural farming and quantum agriculture, among others, will not only help revive the soil poisoned by a century of chemical agriculture,⁷ but will also create more jobs in the agricultural sector. Modern organic or sustainable agriculture is science-and labour-intensive requiring careful seed selection and preparation

and consistent caring of the farm and nature from seed production to harvesting. Agricultural modernisation is also a key in the country's efforts to regain self-sufficiency in staple crops, vegetables and other agricultural products.

The government has already enacted a law promoting organic agriculture (RA 100681 of 2010), and the country has a number of successful organic farming projects that are thriving in the market despite limited assistance by the government. However, the coverage of organic farming is still less than 2% of the total (Manalang et al., 2011). What is needed is more policy consistency in the promotion of organic farming, popularising good or best practices in organic farming, and the formulation by the Department of Agriculture (DA) of a doable national action programme in support of the shift from chemical to organic farming. The reality is that organic agriculture will not thrive in a sea of chemical-based agriculture, because the established agricultural infrastructure, input markets and trading systems are chemical-oriented.

Green the service industries and grow the green segments. Greening the services sector means the adoption of more eco-friendly and eco-oriented business practices, including better treatment of workers through the culture of social partnership and respect for the rights of both workers and employers. Some of the premier tourist destinations in the country are already espousing the principles of eco-tourism such as Subic, Bohol and Palawan. If the country can be and greened with higher standards of sanitation of hygiene, it has the potential of rivalling its Asian neighbours in attracting tourists from the current two to three million a year to 12 to 15 million.

Build jobs by renewing the environment. Greening the three economic sectors through the ISG approach should be complemented by the general programme of rebuilding or renewing the environment which has the potential of creating millions of jobs:

i. *Greening the forest lands.* The Philippines has huge forest lands without any forests. Bringing back the forests can be a source of growth and job creation, because it implies huge investments on reforestation and tens of thousands of forest growers. Haribon, the country's pioneer CSO on biodiversity, has documented cases showing that reforestation is sustainable if undertaken or supervised by dedicated public and private institutions. The sustainable "rainforestation" scheme developed by the Visayas State University has been successfully implemented by the Energy Development Corporation in regenerating the forest in the large EDC concession area (over 100,000 hectares) in Leyte, and in generating jobs for the surrounding communities. The poor who forage the forests or even harvest trees can be transformed into forest-keepers based on the rainforestation model. If the government can allocate so many billions for the "conditional cash transfer" for poor families so that their children can go to schools, why not appropriate a decent sum for rainforestation?

ii. *Greening the community/habitat.* CC-proofing and greening “barangays” (villages) have big potentials as growth locomotives and job generators. Undertaken nationwide, this programme can create millions of jobs and trigger robust economic revival. ILO’s experimental programmes and the Filipinos’ tradition of “bayanihan” in community re-building show that idle or unemployed workers in each barangay can be mobilised to undertake low-cost but CC-important fortification projects such as dredging of waterways, concreting of flood walls and pathways, fortifying or rebuilding of multi-purpose community centres (which also serve as refugee centres in times of disasters), strengthening of dikes, etc. In short, community renewal can address the damaging impacts of CC in an economically productive, sustainable, participatory and anticipatory manner while creating jobs, millions of jobs, for the estimated four million unemployed Filipinos.

In addition to the above, the country has other big but job-creating tasks: greening the coastal areas throughout the archipelago, enforcing all the environmental laws (air and water among other), and transforming the dump sites in each city and locality into integrated solid waste facilities (for example, organic waste transformed into organic fertiliser, non-organic materials into “brick” construction materials, and methane gas as fuel for power co-generation).

4. Green transformation in support of ISG growth and development

To summarise, an ISG pattern of development based on the green/greener transformation of the economy is attainable. The green transformation means growing not only the green sector (renewable energy and recycling among others), which should be continued and intensified, but also greening the existing agricultural, industrial and service sectors and launching a greening of the forest land, communities and the general environment. Such transformation should lead to the transformation of “brownish” jobs into greener ones and the creation of newer green jobs. However, a green transformation requires decisiveness of the national leadership and the citizenry to push for reforms to achieve such transformation. The following are the minimum reforms that can be implemented:

i. Empower the poor: implement social reform

There is no shortage in the Philippines of social reform programmes aimed at liberating the poor from poverty—from agrarian to urban reform, from coastal to ancestral domain reform, and from health insurance coverage to varied livelihood assistance programmes. The problem is that there is a big gap between rhetoric and implementation, and between declared targets and budgetary allocations. For example, agrarian reform, 25 years old (in June 2014), is still unfinished. The implementers have also neglected the task of

transforming the landless beneficiaries into modern agribusiness and ecology-minded producers. Thus, despite land transfers, most of the agrarian reform beneficiaries have remained poor.

An ISG vision of development requires an all-out mobilisation of society. If the poor are excluded in the process because of their poverty and the government's failure to empower them through meaningful and sufficiently-funded social reform programmes, the resulting growth pattern will remain uneven, unequal and exclusionary.

ii. Address policy coherence issues

There is also no shortage of programmes and laws aimed at protecting the environment. But like with other social reform programmes, the problem is enforcement.

The varied and mounting environmental problems facing the country — deforestation, loss of biodiversity, poor management of solid wastes, decimation of mangroves and coral reefs, urban congestion, deteriorating air and water quality, soil erosion, and so on — are all well-documented and have been articulated by environmental activists since the 1970s. One outcome of this environmental advocacy is the large number of environmental laws enacted by the country such as the laws on reforestation and environmental impact assessment (EIA) of the 1970s, the clean air and solid waste acts of the 1990s and the renewable energy (RE) and biofuel acts of the past decade (see Table 3 for the full listing of laws). Also, as a Party to both the UN Framework on CC Convention (UNFCCC) and the Kyoto Protocol and with its Climate Change Act of 2009 in place, the Philippines has committed to undertake various mitigation and adaptation measures outlined by UNEP. The country is active and well-represented in the various international forums on CC, including Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD).

However, the woeful record of the Philippines in the implementation of its reforestation and other environmental laws and the lack of reliable CC-risk readiness programmes clearly point to the twin problems of policy inconsistency and indecisiveness. To these concerns, another policy issue should be added — the economic growth model or strategy in place is not supportive of a CC-resilient Philippines. In fact, directly or indirectly, this growth model or strategy has aggravated environmental degradation and CC vulnerability. This point is probably best illustrated by a brief history of deforestation in the country through the decades, side by side with a brief discussion of the corresponding growth model or strategy in place during each historical period. (See Annex A).

Table 3: Significant Environmental Laws, 1970s-2010

Year	Acts
1970s	PD 1151 (Philippine Environmental Policy)
	PD 1152 (Philippine Environmental Code)
	PD 705 (forestry and mangrove preservation)
	PD 1586 (Environmental Impact Assessment)
1990	RA 6969 (on “toxic substances and hazardous and nuclear wastes”)
1992	RA 7586 (national integrated protected areas or NIPAS)
1993	RA 9275 (Clean Water Act)
1994	RA 8371 (Indigenous Peoples Rights Act)
1998	RA 8749 (Clean Air Act)
1999	RA 9003 (Ecological Solid Waste Management Act)
2006	RA 9367 (Biofuels Act)
2008	RA 9512 (Environmental Education)
	RA 9513 (Renewable Energy Act)
2009	RA 9729 (Climate Change Act)
2010	RA 10068 (Organic Agriculture Act)

Source: Various environmental laws compiled by Dr. Rene Ofreneo and Joy Hernandez

One policy inconsistency is the total log ban and environmental protection announced and promoted vigorously by the government and but at odds with its mining liberalisation programme. Since the 1980s, various administrations have been reaffirming the total log ban policy, which has not been carried out in a consistent manner. And now this is being subverted by the government mining liberalization programme (under the Macapagal-Arroyo and Aquino administrations). The problem is that most of the big mining investors are not engaged in the old-style “tunneling” in search of the mother lode of high-grade minerals, which naturally requires a smaller and manageable land area. They are instead opting for open-pit mining because most of the available minerals are in low-grade form. Open-pit methods require the cutting and bulldozing of trees in large tracts of land, as well as the disemboweling of hills and mountains.

This is the reason a number of local government units (LGUs), clergy and CSOs are adamantly opposed to mining. To them, mining means deforestation, watershed destruction and pollution of large areas by mine tailings. This is why in central Mindanao, there is a popular resistance to the project by Sagittarius Mines, Inc. and Xtrata Plc to develop the “Tampakan copper-gold” mining claim, which covers close to 10,000ha of forest and agricultural lands straddling several towns of four provinces. If allowed to commence production, the project will immediately clear 4,000 hectares of forest and agricultural lands, and will displace a thousand B’laan tribal families. According to a study by Dr. Esteban Godilano (2012), a geo-hazard scientist, the Tampakan project is a big threat to the environment. The mine’s tailing pond shall be adjoining the Mal River, which is a major source of drinking water and irrigation for 200,000ha tilled by some 80,000 farmers. Dr. Godilano also pointed out that

the situation is compounded by climate change risks, which are likely to reduce water supply in Mindanao by 20% in 20 years. He added that the Tampakan project poses other risks: high seismic activity induced by mining activity (because the mine's area is in the fault line), aquifer contamination, polluted tailings flowing to many rivers and streams, landslides and loss of biodiversity.

Another policy inconsistency revolves around the promotion of renewable or clean energy. Under the Marcos administration in the 1970s, the Philippines became the second leading geothermal producer in the world. The problem is that the expansion of the non-renewable sector (especially wind, solar and biomass) has been limited. This is partly due to the vigorous opposition by some neo-liberal economists and coal proponents to the subsidies for the renewables via the feed-in-tariff mechanism, which they consider as a violation of the free market. They want the country to avail instead of the supposedly cheaper imported coal. The coal-fired power plants account for around 35% of the country's total power generation.

Overhauling the current development framework

The existing development blueprint, or the Philippine Development Plan (PDP) 2011-2016, is the most inconsistent in its policy. The National Economic Development Authority (NEDA) emphasises that the PDP is socially inclusive. Inclusiveness, however, is interpreted in a rather narrow manner — that is, accelerating the growth of the economy so that more jobs can be created.

But how can that growth be achieved? NEDA's answer is also rather narrow — encourage foreign and domestic corporations to invest in the new liberalised economic environment. In particular, NEDA has been marketing the programme of public-private partnership (PPP) as a means of attracting these investments. Accordingly, the PPP shall help solve the country's huge social and physical infrastructure backlogs (e.g., roads, bridges, airports and hospitals among others). Under the PPP programme, big corporations are encouraged to invest in infra projects, usually under a 25-year "build-operate-transfer" (BOT) scheme with government-guaranteed returns on investment.

In short, the present PDP, although relatively thick compared with previous Medium-Term Philippine Development Plans (MTPDPs), is essentially another SAP-oriented privatisation blueprint. The social and economic outcomes under the SAP programme are neither inclusive nor empowering for the poor (see Annex A). Nor has the economy been sustainable, as reflected in the declining industrial and agricultural base of the country.

But is the PDP a green blueprint? On the plus side, the PDP has one whole chapter (chapter 10) titled "Conservation, Protection & Rehabilitation of the Environment and Natural Resources." The chapter enumerates the different environmental problems such as urban pollution, solid waste disposal, water

scarcity, land erosion, shrinking forests, diminishing biodiversity, marine resource exhaustion and “extreme vulnerability to environmental hazards and climate-related risks.” It also identifies the needed policy responses: more vigorous enforcement of existing environmental laws such as the clean air act; stronger role for local government units (LGUs) in environment and natural resource management; fuller implementation of the REDD programme (Reducing Emission from Degradation and Deforestation) and; better land and resource management.

However, chapter 10 of the PDP appears to be silent on the challenge of “greening” existing industries and the economy as a whole. In fact, chapters 1 and 2, which mention the environmental problem in passing, fail to put the “green” in the so-called “inclusive growth” macro-economic model, which is clearly a continuation of the old, outward-looking, export-oriented, agro-industrial strategy based on the abstract notion of competitiveness under liberalisation. As mentioned, the strategy is still focused on liberalising the market in order to attract a steady flow of investments, especially in the development of needed infrastructure via the PPP modality. And yet, the environmental and exclusionary impacts of the PPPs are hardly discussed in the PDP, and neither is the challenge of developing green industries through some government assistance and protection, which is still an anathema to neo-liberal technocrats.

5. Conclusion

Transition and transformation now!

It is abundantly clear that an ISG transformation of the economy, as outlined in this article, is not easy. It entails a bold restructuring of the economy as the neo-liberal growth model has clearly failed. This will obviously take time, patience, and, yes, political will on the part of the national leadership. This ISG shift requires policy coherence, decisiveness and consistency.

A green transition programme has been outlined by the ILO-UNEP and the DOLE’s Institute of Labor Studies (Cruz, 2009). The programme has to be expanded and deepened in the context of the ISG framework as discussed in this paper. In particular, there is a need to address the task of upgrading and expanding the country’s agricultural and industrial base while greening the whole economy. This transition requires social consensus, which, in turn, requires deeper and sustained social dialogues between and among various stakeholders in society, for example, on key strategic thrusts enumerated by the ILS namely, building knowledge assets; targeting green sectors (and greening challenges in the large brownish sectors!); setting standards; maximising community benefits; linking green job creation with job training; partnering towards building adaptive capacity; mapping pathways out of poverty and; measuring results.

To repeat, the Philippines cannot afford to stay where it is or do business as usual. It must embrace the ISG challenge now. Carpe diem!

Notes

1. This paper was originally submitted to “The Economy of Tomorrow” Project of the Friedrich Ebert Stiftung. It was presented in July 2012 before a panel of commentators from the Department of Labor and Employment, trade unions and environment/civil society organisations.
2. The “temporary manpower export” programme was launched by the Marcos administration in the mid-1970s to ease unemployment. It was officially considered an “interim” programme while the “labor-intensive export-oriented” (LIEO) industrialisation had not yet taken off. In the 1980s, the acronym LIEO was shortened to EOI, or export-oriented industrialization, while the “overseas contract workers” were re-christened as “overseas Filipino workers” or OFWs.
3. Until the turn of the millennium, Mindanao (in southern Philippines) had the reputation of being storm-free. Now, no region of the country is immune from typhoons and weather extremities.
4. See Ofreneo, R. E., 2010. *Green Jobs and Green Skills in a Brown Philippine Economy*, Geneva: ILO.
5. Short-term or casual hiring is rampant among low-skilled workers because they are easily replaceable compared with skilled workers, whose training and experience are often invaluable to companies.
6. The Department of Trade and Industry (DTI) under the Aquino Administration has asked a number of industry associations to submit their respective “industry road maps.” However, it is not clear if there is an explicit order for the associations to go up the industry ladder instead of simply recommending policies to help save and preserve industry. The involvement of workers and consumers in the road mapping exercise is also absent.
7. The Provincial LGUs of Negros Island, a major sugar-producing area for over a century, has adopted an island-wide program promoting organic agriculture and the use of organic fertilizer, which is more effective in raising productivity out of Negros soil.
8. The Department of Environment and Natural Resources (DENR) gives a double-digit figure, over 20%, of the forested areas of the country. One explanation for the statistical discrepancy is the inclusion in the DENR estimates of coconut and other standing agricultural crops, while the Ateneo study focuses on the dwindling forests in the declared forest land.

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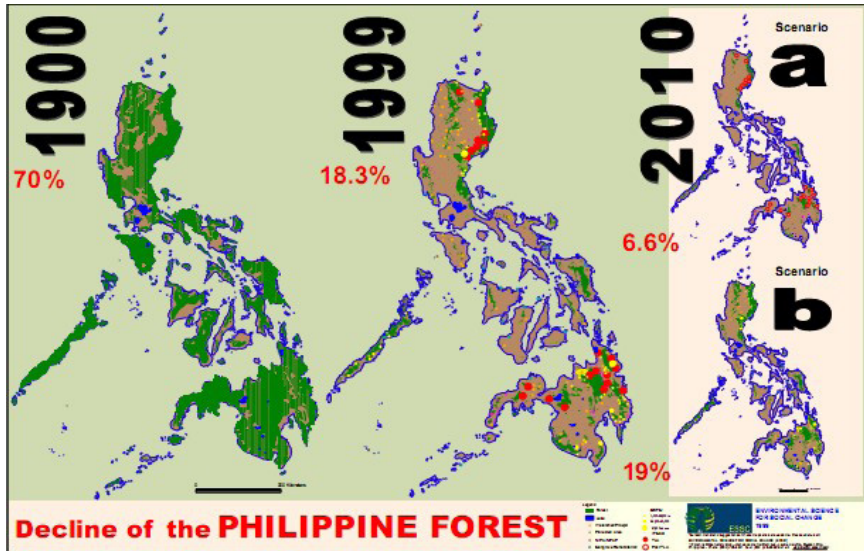
Annex

Economic Growth and the Vanishing Forests

Is there a link between the growth strategy pursued by a country and the state of its environment? The linkage is best illustrated by plotting how forests in the Philippines forests have shrunk under various economic policy regimes.

The Department of Environmental Science for Social Change (ESSC), Ateneo de Manila University, calculated forest cover estimates for different historical periods (Figure 1), with a measly 6% forest cover as at 2010.⁸ If the growth models or strategies in these periods are discussed, then one can have a clearer idea of how the former contributed to environmental degradation.

Figure 1: The disappearing forests in the Philippines



Source: Environmental Science for Social Change, Decline of the Philippine Forest, Ateneo de Manila: Bookmark, 2009.

Spanish colonial period (1521-1900): From 90% to 70% forested land

The country was heavily forested – up to 90% of its 30 million hectares of land – during Spanish colonialism that began in 1521. It took Spain more than three centuries to deforest the land to 70% (21 million hectares) by 1900. Despite difficulties of ruling a far flung empire or overseas imperialist governance, Spain was able to subdue the Philippines through the Cross and the Sword, partly because the under-populated island colony was divided into different independent “baranganic” or village-level political settlements of the archipelago (Constantino, 1975). However, the forests were largely untouched in the first two centuries of Spanish rule because the colonial power was content to transform Manila into a mere transshipment centre for silver from Mexico and silk from China through the well-chronicled “galleon trade”. It was only in the 1830s that Spain opened the archipelago to world commerce and developed export agriculture (sugar, abaca, tobacco and coconut). Still, the Spanish colonial administrators were unable to cover the entire archipelago, especially Muslim Mindanao and the interiors and uplands of Luzon and

and Visayas. Hence, the slow pace of deforestation or land clearing.

The US Colonial rule (1900-1945): From 70% to 50% forested land

When the United States colonised the Philippines, the forested lands shrank faster. From 70% in 1900, the forested lands (out of the total land area) shrank to 18 million hectares or 60% by the 1920s. This was largely due to the expansion of export agriculture (sugar, abaca and coconut) and the corresponding expansion of commercial rice and food production in many parts of the country (Ofreneo, 1993).

During the 1920s-1930s, the United States monopolised the mineral production, initially focused on gold and later, copper and other minerals. Also, one of the coloniser's great preoccupations during its rule in the Philippines was how to subdue Muslim Mindanao and develop the highly forested northern Luzon and its mountainous areas, partly in search of precious minerals.

The American rule was rudely interrupted by Japanese invasion and occupation of the archipelago in 1940-44. The forests became a refuge for Filipinos escaping Japanese cruelty as well as Filipino guerillas fighting the Japanese soldiers; however, some forests were also burned down because they became battle grounds.

The Japanese military rule was followed by a confusing political-economic situation in 1946-50, under an independent Philippine Republic. By then, the country's forest land was down to half of the total land area, or 50% (15 million hectares).

Era of import substitution (1950s to mid-1970s): From 50% to 40% to 30%

In the 1950s and 1960s, the Philippines experienced rapid industrial growth, partly due to the policy of import substituting industrialisation (ISI). This policy fostered the growth of light assembly industries, most of which required the importation of machines and industrial raw materials from overseas, mostly from the United States. To pay for these imports and meet the country's fuel requirements, the government encouraged timber and mineral exports, mainly to a resurgent Japan. Deforestation naturally accelerated, abetted by other factors such as high population growth and the continuing expansion of export crop agriculture and commercialisation of food production for home consumption. Timber or "forest products" became the country's biggest export products, alongside export crops (sugar and coconut) and minerals (gold and copper). Thus, by 1960, the forest cover was down to 40% (12 million hectares).

Deforestation intensified in the 1960s and in the 1970s during the decade of the martial-law. Despite some initial logging restrictions during the 1970s, the forest cover shrank to 10 million hectares or 34% of the country's total land area. The ESSC ruefully wrote that some big islands — Polillo, Batanes

and Marindue in the Luzon group; Cebu, Bohol, Masbate and Guimaras in the Visayas group; and Samal, Camiguin and Jolo in Mindanao — had already lost their forests. It concluded that “The Philippine forest was rapidly disappearing”.

Era of agro-industrial export orientation (1980s-present): From 30% to 6%!

And yet, in the 1980s up to the present, under the export-oriented policy in industrialisation and agricultural development, deforestation continued unabated with the forest land shrinking to 6.9 million hectares (23.7%) by 1987, and to a pitiful two million hectares (6%) by 2010.

The shift from ISI growth model was facilitated in the 1970s with the introduction of labour-intensive, export-oriented industrialisation (LIEO) programme by the IMF-World Bank. This gave birth to the export garments industry in the second half of the 1970s and to the electronics industry in the early 1980s. Both industries, tied to global industrial outsourcing, are located mainly in export processing zones or EPZs.

The LIEO was further institutionalised and deepened in the 1980s and 1990s through a series of IMF-World Bank’s “structural adjustment loans” in support of the general opening up of the economy through trade liberalisation (downward restructuring of tariffs and removal of import restrictions), privatisation of government-owned and government-controlled corporations (GOCCs) and delivery of certain public services (water and power among others), liberalisation of investment regime, and deregulation of various sectors of the economy (finance, industry, agriculture and services). These wide-ranging liberalisation measures are collectively dubbed as the “structural adjustment programme” or SAP, which later became popularly known as the “Washington Consensus” of the neo-liberal economists.

And yet, the economy has failed to take off under the EOI-SAP growth model that has been in place for over three decades. Industry has not grown as robustly as expected; the share of the sector in total employment even shrank. Agriculture has also stagnated. It is only the services sector, fuelled largely by an expanding informal sector and a similarly expanding army of overseas Filipino workers (OFWs), that has been growing year by year. Gareth Porter, an American investigative journalist and environmentalist, wrote that the industrial sector under EOI-led industrialisation process has

“...remained an enclave — a modern sector with no linkage to traditional agriculture. It did little to increase Philippine manufacturing’s labor absorption or to stimulate demand for domestically produced consumer goods. By 1978, the share of manufacturing in total employment had declined from the 1971 level of 11.5 percent to 11.4 percent. Most of the urban working class remained, in fact, in the ‘informal’ sector — in the Philippines primarily unpaid family labor. By the early 1980s, the industrial sector had stagnated due to low domestic demand, and in 1983 it slid into a deep recession as the bill for the Marcos regime’s profligate borrowing came due.” (p. 15)

An uncertain future for the environment

So what is the future for the environment in the country? The answer clearly depends on how the government is able to put environmental concerns at the centre of economic development nationwide. This means greening the economic growth process.