

The Working Class, BioEnergy and Green Jobs: Rethinking Philippines Industrial Relations

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ABSTRACT

As elsewhere, there has been considerable debate on the diminished position of unions commonly associated with the onset of HRM-inspired employment initiatives. The substantial shift in industrial relations is characterized by employment structures from manufacturing towards services and technological changes requiring fewer but more skilled labor. In 2007, the economy grew at 7.3 percent with call center operations posting an epoch perspective in combination with the US 15 billion remittances from overseas Filipino workers. As the country attempts to win the competitive edge, the restructuring and outsourcing activities remain unabated and in the process, more inferior jobs are downgraded into the informal sector which number around 12 million own account workers and 4 million unpaid family workers (DOLE, 13: 2009). The wage and salary workers total 18 million. The informal sector is characterized by marginal, low technology and low profit activities wherein a large number of work are in agriculture. Women and the young are vastly represented in this sector.

The Philippines depends on imported fuels like crude oil derivatives for 48 percent of its power needs. The remaining 52 percent are sourced from indigenous sources like biomass, hydropower and geothermal. The country is the world's biggest geothermal producer behind the United States. Energy is the lifeblood of a modern economy. With its vast alternative energy sources, the Philippines has started to attract major global players as an investment port of call.

This study aims to show how the issues of bioenergy and microfinance have brought about widening interest in workers participation through agricultural based cooperatives in the direction of stimulating the domestic economy and in creating green jobs. Traditional collectivism is particularly strong in the country's cooperative movement with a total of 4.7 million members. The cooperatives have been at the forefront on savings and credit for the past 60 years. Self-reliant and independent, the cooperatives' social capital has helped the transformation of local communities.

Increasingly, the predominantly managerial oriented perspective, with its individualistic as opposed to collectivist values has informed HRM thinking on participation and representation. This has brought about unitarism and the withering away of power and influence of the unions. Individuals as well as communities win and lose in the great flux of markets. Agriculture plays a dominant role in a green economy and in eradicating poverty in the Philippine context. It should serve as the growth center.

Industrial relations is about the search for fairness and equality and yet the gap grows, and all

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that trickles down is the reproduction of a class stratified society. To advance a theoretical perspective on voices and representation is to look for the sources that will drive developments toward industrial democracy in the wider society. There is need for a clearer understanding of the conditions under which workers formulate their interests and voices in the social process relative to forms of collective action and green jobs.

INTRODUCTION

This paper considers industrial relations as an integral part of a wider set of mutually reinforcing institutions which should promote employment growth, gain sharing and income distribution. The formal job market is basically dependent on contact centers, business processing and outsourcing companies. The individualistic nature of the job discourages workers from representative active participation. Despite the deep seated changes in the nature of work and work relations, the 1974 Labor Code has yet to be amended and usually it is legislation which paves the way for new institutions to come into being. The informal sector has continued to prevail and this development constitutes a sharp departure from traditional conceptions of work with solid commitment to trade unionism and collective bargaining as the primary focus of worker expression. Class consciousness is not an exclusive product of the union movement. It is also a product of larger community institutions engaged in struggle (Lustig, 2004:57). The study of industrial democracy is an integral part of the relations between capital and labor and the state in that relationship. A significant collectivistic form of representation has taken place in Philippine society and the state through the Cooperative and the Local Government Codes of 1990 have noticeably empowered the working class in the triangular relationship between labor, capital and the state itself.

With billions of pesos in deposits, the savings and credit cooperatives have paved the way to address basic services from education, health, water, housing and livelihood. Those which are well capitalized in each province have been tapped to be a partner of the *Bangko Sentral ng Pilipinas* (BSP) and local governments to provide credit surety fund to non-collateralized micro, small and medium enterprises. It is predicted that in ten years' time, the financial centers in the provincial capitals will be cooperatives and not banks. The electric cooperatives which number 116 have been mandated by the newly amended 2008 Cooperative Code of the Philippines to register with the Cooperative Development Authority (CDA) and to date 17 of them have done so. Once all electric cooperatives are registered with the CDA, an additional 8 million households will be added to the existing 4.7 million individual members, a total of 12.7 million. Usually, ten thousand members attend the general assembly of big cooperatives to elect their officials and decide on issues in settling both short and long term goals. The election is computerized.

There is very little work on wage inequality and poverty in relation to an industrial relations system which should be part not only of the equation in explaining the widening income inequality but also in strengthening the capacities of workers to participate in domestic market expansion, regional cluster cooperation, international trade development and management. There should be a broadening in the definition of industrial relations on empowerment, the environment and market institutions. The world of work has been changing quite significantly since the 1990s. This has produced substantial changes in the way employee relations has developed driven there by the adoption of flexible working practices, market forces and changes in values. Much of work has become fragmented and many workers transient. It is important to understand how work is translated into employment with reasonable aims of equality and justice. In the search for new systems of representation in decision making, a different dimension of industrial democracy has been the experience with various forms of cooperatives.

To describe the national policy arena and processes on bioenergy and microfinance is to offer a way of exploring industrial relations in terms of people's participation on models of enterprise management and green jobs.

BIOENERGY POLICY AND WORKERS' POTENTIAL IN LOW CARBON WORK

In January 2007, Republic Act 9367, otherwise known as the RA of 2006 mandates the use of biofuels in the country (PNOC, 1: 2007). It aims to reduce the country's dependence on imported, dollar draining and pollution generating petroleum products. The law was the first of its kind in Southeast Asia. It requires the blending of coco methyl ester (CME) or coco-diesel in diesel fed vehicles and of ethanol in gasoline fueled ones. Biofuels are alternative fuels which are produced from the feedstock or organic sources that are renewable such as trees, crops and plant fiber. Bioenergy, that is, biofuels of biological and renewable origin like bioethanol, biodiesel and biomass for energy is the subject of increasing attention around the world. They are carbon neutral fuels which mean that global warming need not get worse. An early initiative is Republic Act 8749 known as the Clean Air Act of 1999 which also provides the framework for the use of alternative fuels for motor vehicles. Biofuels include bioethanol, biodiesel and other fuels. Bioethanol is a light alcohol produced by fermenting sugarcane, corn and cassava. Biodiesel is a renewable and biodegradable fuel extracted from plant oils. Its sources include palm, jatropha, and coconut. The reduction in fuel consumption as a result of the enactment could save as much as \$US 2 billion annually if the country shifts from imported to locally produced diesel. The country imports about 7 billion US dollars worth of oil and petroleum products, 25 percent of which is diesel. The Department of Energy has to date accredited two biodiesel manufacturers, namely Senbel Fine Chemicals which has 54 retail markets and Chemrez, with 56 outlets. Geothermal energy is a means of producing energy by harnessing the heat from the earth and transforming it into electrical energy. Next to the United States, the Philippines is the second largest producer of geothermal power in the world. Apart from providing a substantial amount of electricity, geothermal energy at the same time ensures saving huge amounts of foreign exchange through the reduction of imported fuels. There is also the focus on the non-power application of geothermal resources such as multi-crop dryer projects and the promotion of hot springs for spa resort development.

The most common use for biofuels is in the automotive transport. With the possibility of diversifying energy resources and displacing large oil import bills, locally produced biofuels can reduce carbon emissions. At the same time there are questions about the role of fossil fuels in growing, transporting and processing the feedstock and in refining and distributing the biofuel. The response has been that this uncertainty can already be addressed since commercial energy production from biofuels has undergone technological and economical transformation. The conversion facilities in rural areas, close to where the feedstock is grown should increase employment and wages and ensure the sustainable use of local resources in the community. Energy crops have the potential to extend the land base available for agricultural activities and to create new markets for farmers (Agbon, 17: 2008). These positive impacts in the dynamics of the rural economy should reduce the traditional exodus to urban areas and favor greater investment in rural infrastructure, health and education, The biofuel industries are expanding in Europe, Asia and the Americas

Bioenergy policy making involves as key players the National Biofuels Board of the Department of Energy and the Department of Agriculture (DA). The NBB is primarily tasked to require all entities engaged in the production, blending and distribution of biofuels to submit reports of their actual and projected sales and inventory as well as determine the availability of locally sourced biofuels. The DA, on the other hand, has introduced a national program for the production of

crops for use as feedstock supply to ensure productivity and sustainable areas for cultivation and production of biofuel crops. The food versus fuel debate is not that crucial given the fact that many of the areas being developed for feedstock production are mostly unproductive or marginal land. Many of these lands have remained unutilized and converting them into productive use for biofuels will increase value added agriculture.

Philippines was the first country to use coconut as a source of feedstock for biodiesel. Size is a reliable guide to influence. There are 3.3 million hectares planted to coconut trees. About 25 million farmers and dependents of which 80 percent exported and 20 percent consumed locally. About 68 out of 79 provinces have coconut as their major agricultural product. In 2006, the revenue was US\$ one billion and Mindanao was the major producer with 58 percent of total production. It is observed that coconut creates a better combustion and ability to clean engine parts that come in contact with fuel, lesser emissions leading to better mileage especially for older engines and that in colder climates coco-diesel is able to adapt due to the cold countries below freezing point.

The Philippine National Oil Corporation and its subsidiary, the Alternative Fuels Corporation (AFC) have undertaken biofuel feedstock research that ensures the country's capacity to meet international standards. The AFC aims to bring the Philippines to the forefront of the global alternative fuels industry. The company's twin objectives are meeting the domestic needs for biofuels and becoming a key player in biofuels in the Asia and Pacific Region. It has made jatropha as its feedstock for biodiesel production. Jatropha is a non edible plant that grows mostly in tropical countries and can easily be propagated through cuttings and seeds. The production of biodiesel in the Philippines is projected to increase by 200,00 metric tons in 2009. By 2012, AFC should have established the the 700,000 hectares of biofuel crop plantations and one million metric ton biodiesel refineries. With a ratio of one farmer for every two hectares, 350,000 green jobs can be generated in rural areas with jatropha propagation particularly in Palawan and Mindanao. Women are encouraged at the village level to use the extracted fuel for firing cooking stoves out of jatropha's extracted fuel oil.

BRIDGING THE GAP BETWEEN EXPERTISE FOR THE FEW AND KNOWLEDGE FOR THE MANY

Land and resource rights are significant aspects in bioenergy projects involving the cultivation of energy crops or access to natural biosources. Biomass is the main source of energy use for 3 billion people in the developing world and has been converted into electricity and heat in industrial scale plants. Somewhere at the center of the arguments on how to create jobs and sustainable development, is the critical role of bioenergy and efficient usage. The pay offs from research and development are available and only have to be diffused widely in a continuing effort to bridge the gap between expertise for the few and knowledge for the many. Only an encompassing renewable energy movement can be expected to actively support long term policy commitments to foster proper structures and legitimize socially responsible behavior. If bioenergy is to capture the imagination of the working class, it will not be because of an enlightened minority in the society finds its logic attractive but because in people's everyday organized activities, they choose to act in ways that complement that logic. There are already signs that the power industry is changing in small ways. The last five years has seen an enormous upsurge in interest in clean energy from both environmental and from an economic point of view. For example, seven electric cooperatives in Western Visayas have entered into a joint venture for a biomass driven power plant. Another network are the transport cooperatives

that have moved to convert their engines to LPG. Apart from cutting cost by half the price of regular diesel, LPG is produced as a by product of natural gas and crude oil refining. It leads to much lower emissions of carbon monoxide and enables a vehicle to travel farther per liter. The Philippines has a potential installed capacity of 253.7 MW from bagasse resources. The impact of the global financial meltdown would disproportionately affect the very poor and the unemployed. State support for education is critical in supplying high quality manpower in the effective functioning of power grids and in fostering people's participation in energy poor rural areas. An essential component of the new development strategies is the growing recognition of cooperatives to become one of the key players since they constitute highly powerful actors in various communities. The government faces a formidable challenge in reconciling its emphasis on efficient energy and integration with people's right to democratic governance. The current emphasis on joint ventures should set an example by applying standards of transparency, accountability and participation.

Commercial banks have always financed large scale agriculture(Llanto, 2001:2). The cooperative movement on the other hand has mobilized savings for the entrepreneurial rural sector. The 1997 National Strategy for Microfinance provided that for low income households and microenterprise to be able to access credit, the overall vision was for a regulatory framework to facilitate the role of the private sector in the provision of financial services. As a result, government especially non-financial line agencies could focus instead on the creation of an enabling policy environment. In 2000, *the Bangko Sentral ng Pilipinas* (BSP) was mandated by the General Banking Law of 2000 to recognize microfinance as a legitimate banking activity and to set the rules and regulations for its practice within the banking sector. The People's Credit and Finance Corporation (PCFC) has a micro energy credit program for adequate, affordable and reliable energy services. There is no doubt that attention has been given to financing micro-bioenergy projects such as in the planting of sugarcane, cassava, jatropha and coconut. In 2004, a total of 305 billion has been spent to 5.6 clients which created 2.5 million jobs. The poor have proven that they have the capacity to repay their loans and to save and that microfinance institutions can be operational and self sufficient.

The Development Bank of the Philippines (DBP) has a microfinance resource center for high value commercial crops financing as well as organic farming. . The Land Bank of the Philippines (LBP) has entered into an agreement with Marcela Farm in the purchase and selling of emission reduction from piggery waste to energy project. Both DBP and the LBP are members of the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP), a United Nations accredited international organization of development banks frontline to institutionalize green banking practices. The LBP plans to give a special award to cooperatives and SMEs that will demonstrate performance in protecting the environment and impact mitigating measures. The working class should have the full knowledge on the role of bioenergy in the development of local communities at large. While energy and job creation differ in many respects from other conventional types of employment, there is the opportunity for a most economically dynamic agriculture sectors.

The Department of Environment and Natural Resources (DENR) program on the Upland Development Program (UDP) has two components in its emergency employment efforts under the green collar jobs program. Some 21, 000 hectares of open lands within the country's watershed areas would be planted with fruit bearing trees and high value crops wherein thousands of upland farmers are expected to benefit. The other component is the Bantay Gubat project where 59,000 qualified members of upland communities will be hired as short term forest

guards to keep watch against forest fires and illegal logging activities. A total of 54,425 upland farmers each representing one family will benefit under the UDP program with each farmer getting a hectare to develop.

THE FUTURE OF THE ECONOMY ARE GREEN JOBS

The Philippines aims to generate 20 percent of its energy from renewable resources by 2015. The Renewable Energy Act of 2008 (RA 9513) promotes the intensive development, utilization and commercialization of renewable energy source-geothermal, hydropower, biomass, solar, wind, ocean and other emerging energy source. It recognizes the critical need to provide adequate and sustainable energy services. Considered the most comprehensive renewable energy law in Southeast Asia, it aims to work towards:

A green pricing option to promote consumer choice of power supply;

Allocation of a minimum amount of generation capacity from renewable energy;

Promotion of the use of renewable energy hybrid systems and applications;

Conduct of sustained information dissemination on renewable energy development; and the Provision of financial and fiscal incentives to renewable energy developers and implementors.

Asia accounts for 27 percent of the world's energy related greenhouse emission and the World Bank pushing for its Clean Development Mechanisms (CDM) program that encourages developed countries to come up with carbon reducing energy projects in developing countries. The CDM is a program under the Kyoto Protocol, a treaty agreed upon by 169 countries to reduce carbon emission from fuel consumption of cars, power plants and other industries. The Kyoto Protocol obliges states and companies to reduce their emissions, as they receive carbon credits which they can sell. There are two primary markets for carbon offsets. In the larger compliance market, companies, governments or other entities buy carbon offsets in order to comply with their emission caps. In the smaller voluntary market companies sell carbon credits to commercial and individual customers who are interested in lowering their carbon footprint.

While the rural poor are faced with new vulnerabilities, they also are faced with new opportunities. The green economy and an activist state should reveal new trends on how workers are able to gain real influence over technological change at work. There is great potential for carbon sequestration projects in the Philippines, primarily due to its biophysical condition and presence of land areas that could and should be reforested. There are millions of hectares in the uplands that pose ecological and economic threat. For financing, projects, the rapid expansion of the agriculture frontier in investment are reflected the entry of some very powerful foreign economic actors. There is much to be learned for the working class in the management of the collective knowledge and experience of local groups in the impact of new technology on bioenergy work conditions. The people must learn how to come me up with appropriate solutions together on the utilization of indigenous renewable and sustainably sources of clean energy to mitigate toxic greenhouse gas emissions and increase rural employment and income.

President Arroyo has set a June deadline for local government units to comply with Republic Act 9003 or the ecological solid waste management act. Only 10 percent of the compliance is being met but she wants 50 percent by June. Arroyo chairs the Carbon Cutting Coalition with 17 member agencies constituting the Presidential Task force on Climate Change (PTFCC) which she created in 2007 with the DOE and DENR at the helm. The PTFCC conducts a rapid

assessment of the impact of climate change on the country especially on the most vulnerable sectors like water, agriculture, coastal areas, as well as terrestrial and marine ecosystems. The PTFCC also ensures strict compliance with air emission standards and act with urgency to combat deforestation and environmental degradation. In 2004, the Payatas dump was converted into a controlled waste disposal facility and equipped with a biogas plant. Since assuming the title of environmental czar, Arroyo checked the various municipalities and towns on the handling of garbage which is a major source of methane, a lethal greenhouse gas.

Carbon trading is similar to the exchange of securities and commodities where carbon is given an economic value. In 2000, the NorthWind Power Development Corporation was established and in 2005, the first 25 megawatt (MW) wind farm in Bangui Bay was introduced. In June 2008, NorthWind added five more turbines and raised the wind's farm capacity to 33 MW enabling the company to provide half of the province's power needs. The project catalyzed the emergence of the carbon market because of the World Bank's carbon finance program through the sale of carbon emission reduction credit under the CDM of the Kyoto Protocol.

Currently, there are 23 CDM projects registered with the CDM Board in the Philippines. A number of them is on agricultural wastes as well as renewable energy alternatives to fuel. The Community Development Fund is also being accessed in the context of initiatives on composting, wastewater treatments and agro-forestry. The communications media must play an important role in building bioenergy awareness into the popular culture in green jobs creation. A meaningful assessment of the social consequences of green economy begins with the fact that the very success of NorthWind opens up new choices that available for the working class.

CONCLUSIONS

A massive cultural change is underway on the issue of global warming the world over. More and more people and institutions are joining the green movement and they are bound to bring changes of lifestyle and work relations. Industrial relations' fight against inequality should be considered the first priority and for new institutional forms to be created. In order to foster dialogues, there is a need to generate multiple spaces in which to concentrate initiatives and push forward joint efforts. Technological breakthroughs open up the possibilities of struggle, organization and negotiation that are both new and powerful. Alliances that may be forged and the solutions adopted could pave the way for an articulation of collective projects and the engagement with these projects to finally represent the voices of the majority of a population.

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