

Connecting Members, the Coop Way: Technological Innovation as a Strategy

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The role of cooperatives in the lives of their members cannot be overemphasized. Cooperatives are primarily established to improve the socio-economic status of their members. They have grown to 24,000 offices in the Philippines and are continuously expanding. However, the cooperative sector faces global challenges that have a significant impact on its members. One of these is the entrance of several technology providers. These providers introduce technological innovations that may change the cooperative way of business. In light of these challenges, the cooperative sector has to keep up with the pace of its competitors in order to protect its market. Several non-traditional entrants like Facebook, PayPal, TelCos (i.e., globe and smart) have seen the opportunity of using technology to offer e-commerce, e-payments, loans, and training. If the cooperative sector cannot keep up with this trend, these commercial providers will eventually exploit the market opportunity that this sector offers.

The cooperative sector should find ways to bridge the gap by being high-tech yet high-touch in delivering its service. It can adopt the Blue Ocean Strategy (BOS) developed by Kim and Mauborgne of INSEAD Business School. This strategy is not about beating the competition but making the competition irrelevant. The cooperatives must be able to understand the needs and dilemmas not only of their members but also the individuals in the community they are operating on. They need to open their ears to hear what the market demands. Equally important, technological innovations must also be included when formulating their strategies.

The concept of BOS can be adopted by cooperatives in many ways. For example, if a farmer has low income because his products pass through several channels/traders before they get to the end-consumers, he can take advantage of e-trading platform that limits the presence of these intermediaries. However, farmers usually do not have access to the Internet. There is, therefore, a need to come up with a go-to-market strategy using the e-trading platform by making use of technologies that are readily available and most often used by farmers such as their mobile phones. This process can be simplified further by setting up a customer service that will provide step-by-step guidance to the farmers.

In this way, the complicated customer interface is eliminated, storage cost is reduced, income and customer services are raised, and a new simplified SMS-interface (short message service) with complementing services like technical assistance, access to finance input and supply management, and payment platform is created. This is the ERRC (eliminate-reduce-raise-create) grid or the four actions framework of Kim's and Mauborgne's Blue Ocean Strategy.

Another example of BOS in cooperatives pertains to the issue of addressing their training needs. Cooperatives expect training to be more flexible to the needs of the cooperatives, low-cost, and standardized. There is also the need to address the dilemmas of low attendance during training due to distance problem and lost training certificates before they get submitted to the Cooperative Development Authority (CDA). All these can be answered by offering e-learning type of training. This strategy eliminates face-to-face interaction, reduces training cost, raises standardization, flexibility, learning retention, and creates a new platform. This new e-platform makes use of mobile phones, an offline-version through an encrypted disk and a feature that auto-submits certificates to CDA. This strategy satisfies the ERRC requirement of BOS.

Given these examples, it can be said that the right strategy is not really about competing and having the most sophisticated technology; rather, it is about understanding the needs of the cooperative members and their communities. Embracing technology while keeping its cooperative identity intact is the more important factor in addressing the needs of the cooperative sector.



Understanding the Link Between Green Growth and Agriculture

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In 2009, the Organization for Economic Co-operation and Development (OECD) laid the groundwork for green growth (OECD 2011) as a global strategy for dealing with some of the world's most daunting challenges and pressures. These include: a) an escalating world population that is projected to grow to 9.1 billion by 2050 with 80% of this growth coming from developing countries; b) the challenge to increase global cereals and meat production annually by one billion tons and 200 million tons, respectively (FAO 2010); c) climate change that causes uncertainties on grains, food, and feed production; and d) the fast-paced growth of developing countries which has exacerbated the pressure on the environment and natural resource base upon which such growth has depended.

Green growth involves an "actionable framework that fosters conditions for investment, innovation, and competition that give rise to new sources of economic growth consistent with resilient ecosystem." It is "growth that not only helps green economies, but also helps move towards sustainable development by ensuring that environmental sustainability contributes to, or at least does not come at the expense of, social progress" (ADB et al. n.d.). The move toward growing green entails three requisites: low carbon or pollution, resource efficiency, and social inclusion (UNEP 2012).

The green growth model identifies environmental resource protection and conservation as a way of achieving national and global economic progress. To achieve such goals, the political economy of change and the environmental consequences of current economic development patterns have to be faced. Inasmuch as agriculture remains and will continue to be an important growth sector of developing countries, the goal of transitioning toward low-carbon, resource-efficient, and socially inclusive economies will require long-term policies and adjustment strategies are cut across economic, environmental, and sector interventions. To demonstrate the specific relationship between agriculture and green growth, Stevens (2011) presented the possible synergistic and conflicting effects between the two (Table 1).

Table 1. Agriculture and green growth: Complementarities (+) and Differences (-)

| | Economic Contribution of Agriculture to Green Growth | Environmental Contribution of Agriculture to Green Growth | Social Contribution of Agriculture to Green Growth |
|---|--|---|--|
| Economic Contribution of Green Growth to Agriculture | Agriculture is the basis of economic development while Green Growth can improve agricultural performance (+) | Green labels and eco-services can contribute to economic returns in agriculture (+) | Green jobs and activities can diversify and contribute to rural development (+) |
| Environmental Contribution of Green Growth to Agriculture | Environmental measures may slow agricultural growth in the short-term (-) | Green Growth will yield environmental co-benefits in agriculture through resource conservation and carbon sequestration (+) | Reform of supports to relieve environmental stress can promote more equitable farm incomes (+) |
| Social Contribution of Green Growth to Agriculture | Green Growth may detract from efforts to improve food security in the short-term (-) | Green Growth will necessitate structural adjustment measures in transition periods (-) | Food security, poverty reduction and rural development will be enhanced through Green Growth (+) |

Source: Stevens, C. (2011). "Agriculture and Green Growth"

The main diagonal presents the mutually reinforcing factors between green growth and agriculture. Those below the diagonal show the contrasting effects on each other particularly in the short-term while those above the diagonal present paired interventions that may be mutually enhancing.

Stevens (2011) summarized the economic, environmental, and social contributions of both agriculture and green growth. Agriculture contributes to green growth in terms of food security, providing environmental and ecosystem services, and in nourishing the growing population. On the other hand, green growth provides agriculture green tools and techniques, environmental investments, and enhanced social welfare for farm families.



The EFTA-Philippines Free Trade Agreement

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The Philippines signed a free trade agreement with the European Free Trade Association (EFTA) on April 28, 2016. EFTA is an intergovernmental organization that was set up to promote free trade and economic integration and benefit its member states, namely, Iceland, Liechtenstein, Norway, and Switzerland. With a combined population of over 13 million and GDP of US\$ 1.2 trillion, the EFTA States are the world's ninth largest merchandise trader.

The EFTA-Philippines free trade agreement has comprehensive coverage, including trade of goods, rules of origin, trade facilitation, SPS, TBT, trade in services, investment, competition, protection of intellectual property rights, government procurement, and sustainable development. The Philippines is one of EFTA's 37 trade partners outside European Union.

The EFTA and Philippine economies have a large disparity. Population-wise, the Philippines is a big market with a population of 100.7 million; EFTA has a population of only 13.85 million in 2015. EFTA has much larger GDP of US\$ 1 trillion while the Philippines has US\$ 292.5 billion. Altogether, the Philippines-EFTA agreement would cover 114.5 million people and with GDP of US\$ 1.293 trillion. This suggests a large market but the incremental market size in terms of GDP is minimal in reference to EFTA. The per capita income disparity is large — averaging only US\$2,904 for the Philippines and US\$ 70,000 for EFTA countries.

Merchandise trade between the EFTA states and the Philippines reached an average annual rate of 11% from 2005 to 2015. In 2015, the total merchandise trade between EFTA states and the Philippines was valued at US\$ 863 million, with Philippines export to the EFTA states reaching US\$ 456 million and exports from EFTA to the Philippines amounting to US\$ 407 million.

Agricultural products commonly traded between EFTA and the Philippines are meat and fish products. Top agricultural exports of Philippines to EU are preserved fish, fish fillets and fish meat, coconuts, and edible fruit and nuts (Table 1). Top agricultural imports of the Philippines from EU are cocoa, vegetable fats or oils, sugar confectionary, and frozen fish (Table 2).

The free trade agreement involves tariff concessions on basic and agricultural products. Specific provisions facilitating trade in fish and other marine products are included in the agreement. The EFTA-Philippines free trade agreement is expected to boost market access of Philippine agricultural and fisheries products to EFTA countries which will have a strong impact on Philippine exports. Moreover, the trade agreement will supplement the economic cooperation and exchanges between the parties under the free trade agreement and, as a result, the trade agreement will provide stronger stimulus for further development of trade and investment.

Table 1. Philippines' top agricultural export commodities to EFTA, 2015

| Commodity Code | Commodity Group | Export Value (US\$ million) |
|----------------|---|-----------------------------|
| 304 | Fish fillets and other fish meat fresh, chilled or frozen | 10.97 |
| 801 | Coconuts, Brazil nuts and cashew nuts, fresh or dried | 2.73 |
| 1604 | Prepared or preserved fish | 1.48 |
| 2008 | Fruit, nuts and other edible parts of plants | 1.03 |

Source: COMTRADE

Table 2. Philippines' top agricultural import commodities from EFTA, 2015

| Commodity Code | Commodity Group | Import Value (US\$ million) |
|----------------|--|-----------------------------|
| 1806 | Chocolate and other food preparations containing cocoa. | 13.97 |
| 303 | Fish, frozen, excluding fish fillets and other fish meat | 10.31 |
| 2106 | Food preparations not elsewhere specified or included. | 5.39 |
| 1517 | Margarine; edible mixtures or preparations of animal or vegetable fats or oils | 5.39 |
| 1704 | Sugar confectionery (including white chocolate), not containing cocoa. | 3.74 |

Source: COMTRADE



Strengthening Relations with EU through EU-Philippines Free Trade Agreement

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The European Union is a unique economic and political union among 28 economically diverse European countries. The EU countries' level of GDP ranges from US\$9 billion in Malta to over US\$3,363 billion in Germany. EU is the largest economy in the world with 22% of the world's total GDP and 500 million consumers. EU is also one of the world's biggest traders with 12% of the world's total trade. Negotiations for an EU-Philippines Free Trade Agreement (FTA) were launched on 22 December 2015. This FTA aims to cover a broad range of issues, including tariffs, non-tariff barriers to trade, trade in services and investment, trade aspects of public procurement, intellectual property, competition and sustainable development.

EU is an important source and destination of Philippine trade. Trade between the Philippines and EU represents more than 12% of the total Philippine goods traded in 2015. With bilateral trade in goods amounting to US\$7 billion, the EU ranks as the Philippines' fourth largest trading partner, while the Philippines is EU's sixth largest trading partner.

EU's exports to the Philippines are dominated by transport equipment (30.9%), machinery (14.9%), food products (13.2%), chemicals (11.5%), and electronic components (11.3%). Meanwhile, the Philippines' main exports to the EU are office and telecommunications equipment (44.9%), machinery (15.1%), food products (12.5%), and optical and photographic instruments (11.1%).

In 2015, the top agricultural products traded between EU and the Philippines include coconut, meat, and fish products. The top agricultural exports of Philippines to EU are coconuts, fish and fruits (Table 1). About 59% of the Philippine coconut exports head to EU. Therefore, it is expected that there will be a positive impact for the Philippine exporters of these products. While the shares of Philippine exports to EU appear to be large, the contribution of the Philippines to EU is minimal. Only 7% of the total coconut imports of EU is sourced from the Philippines.

In terms of imports, the agricultural products of the Philippines in EU are fresh or frozen meat, food industries residues and waste, alcoholic beverages, edible meat, and dairy products (Table 2).

Geographically, a vast distance separates the Philippines from EU and there is no land transport that links the two. Thus, only sea and air transportation can connect the two; this could possibly make the transportation costs high. The cost will be a major determinant of the direction of agricultural trade. Agricultural produce, fresh, frozen, or chilled products face high costs in entering the EU market. Agricultural products that can be economically shipped from the Philippines to EU and vice-versa will likely be in processed form.

Table 1. Philippines' top agricultural exports to EU-28, 2015

| Code | Commodity Group | Export Value (US\$ million) |
|------|--|-----------------------------|
| 1513 | Coconut (copra), palm kernel or babassu oil | 478 |
| 1604 | Prepared or preserved fish | 162 |
| 0801 | Coconuts, fresh or dried, whether or not shelled or peeled | 91 |
| 2008 | Preparations of vegetables, fruit, nuts or other parts of plants | 80 |
| 1302 | Vegetable saps and extracts | 62 |

Source: COMTRADE

Table 2. Philippines' top agricultural imports from EU-28, 2015

| Code | Commodity Group | Import Value (US\$ million) |
|------|--|-----------------------------|
| 203 | Meat of swine, fresh, chilled or frozen. | 108 |
| 2309 | Preparations of a kind used in animal feeding | 100 |
| 2208 | Beverages, spirits and vinegar | 80 |
| 0206 | Meat and edible meat offal | 79 |
| 0402 | Milk and cream, concentrated or containing sweetening matter | 70 |

Source: COMTRADE



The Regional Comprehensive Economic Partnership (RCEP): The next best alternative to TPP?

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The Regional Comprehensive Economic Partnership (RCEP) is a so-called mega-regional economic agreement being negotiated between the 10 ASEAN governments and their six free trade agreement (FTA) partners: Australia, China, India, Japan, New Zealand, and South Korea. This agreement may present an alternative to the TPP in achieving freer trade throughout the Asia-Pacific region. The 16 RCEP participating countries account for almost half of the world's population (48%), more than 30% of global GDP, and over a quarter of world exports.

RCEP participating countries are important economic partners and regional neighbors of the Philippines. Eight out of Philippines' top 10 trading partners (China, Japan, Republic of Korea, Singapore, Thailand, Malaysia, India, and Indonesia) are participating in RCEP negotiations. Collectively, in 2015, RCEP countries represented almost 55% of Philippines' total trade, taking nearly 50% of Philippine exports and over 60% of Philippine imports with a combined value of US\$ 70 billion.

Philippine trade to RCEP countries is shown in Table 1. Among the other 15 RCEP countries, Japan and China are the major trading partners of Philippines. Some 15% and 14% of the total goods traded by the Philippines went to Japan and China, respectively. Majority of Philippine imports also came from China and Japan. In terms of agricultural trade, the Philippines imports rice and wheat and measlin from RCEP member countries such as Vietnam (14.4%) and Australia (8.6%). Milk and cream products are obtained from New Zealand (28.9%), Australia (9.2%), and Malaysia (5.3%). For fruit exports such as pineapples, mangoes, and bananas, the major RCEP member markets are Japan (29.2%), China (17.2%) and Korea (11.7%). The United States absorbs 47.7% of total Philippine coconut exports followed by Japan with 5.6% and Canada with 1.4%. Japan and China are the major markets of Philippine bananas absorbing 65% of total banana exports.

Huge economic disparities among the negotiating countries are likely to pose a challenge to the completion of RCEP negotiations. In 2015, China is the largest economy among the RCEP nations with 1.3 billion people and GDP of US\$ 11 trillion. This accounts for almost half of total RCEP region's GDP and population. The smallest country is Laos with GDP of US\$ 12.4 billion and population of 6.8 million people. The Philippines has 100.7 million and GDP of US\$ 292.5 billion. Australia has the largest per capita income of US\$ 56,311 and Myanmar has the smallest at US\$1,161. Because the per capita income disparity is large, there is little to be expected by way of increased intra-industry trade.

Moreover, China's aggressive postures on territorial disputes with ASEAN member countries on the South China Sea may also pose a significant hurdle to RCEP negotiations. But if negotiated successfully, RCEP would create the world's largest trading bloc. This would have major implications for Asian countries, including the Philippines, and the world economy.

Table 1. Philippines' imports from and exports to RCEP countries, 2015 (value in million US dollars)

| Country | Phil Imports | % Share in Phil Total Imports | Phil Exports | % Share in Phil Total Exports |
|-------------------|--------------|-------------------------------|--------------|-------------------------------|
| Australia | 845 | 1.20 | 451 | 0.77 |
| Brunei Darussalam | 7 | 0.01 | 12 | 0.02 |
| Myanmar | 20 | 0.03 | 34 | 0.06 |
| Cambodia | 15 | 0.02 | 9 | 0.01 |
| China | 11,478 | 16.36 | 6,393 | 10.90 |
| Indonesia | 3,109 | 4.43 | 628 | 1.07 |
| Japan | 6,761 | 9.64 | 12,381 | 21.11 |
| Rep. of Korea | 4,550 | 6.49 | 2,512 | 4.28 |
| Lao PDR | 0.16 | 0.00 | 16 | 0.03 |
| Malaysia | 3,305 | 4.71 | 1,199 | 2.04 |
| New Zealand | 388 | 0.55 | 46 | 0.08 |
| India | 1,279 | 1.82 | 373 | 0.64 |
| Singapore | 4,880 | 6.96 | 3,650 | 6.22 |
| Viet Nam | 1,273 | 1.81 | 727 | 1.24 |
| Thailand | 4,434 | 6.32 | 2,263 | 3.86 |
| RCEP Total | 42,344 | 60.36 | 28,181 | 48.05 |
| World | 70,153 | | 58,648 | |

Source: COMTRADE 2017



The Trans-Pacific Partnership (TPP): What could have been?

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In January 2017, the United States pulled out of the Trans-Pacific Partnership (TPP), practically killing what was once touted as the most ambitious free-trade agreement in history. Before the demise of the agreement, the Philippines considered participating in the TPP. What was the TPP? What would have been the benefits of the Philippines' participation in the free trade agreement?

The TPP was a proposed regional free trade agreement (FTA) among 12 economically and demographically diverse countries — Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam. The United States is more than twice as large as the total of other TPP countries in terms of economy. In terms of population, the United States accounts for 40% of the total TPP region. GDP per capita, a rough measure of a country's level of economic development, ranges from just over US\$ 2,100 in Vietnam to over US\$ 56,000 in the United States and Australia. The countries also vary greatly in terms of geography from a large and resource-rich continent of Australia to a small and trade-dependent Singapore.

A potential TPP FTA would have presented an opportunity for the Philippines to expand its trade and investment with a large and fast-growing regional market. TPP countries are collectively home to almost 11% of the world's population and producing nearly 40% of global GDP. TPP also includes some of the 2015 fastest growing economies in the world (e.g., average GDP growth for 2014-2015 is 6.68% in Vietnam, 4.97% in Malaysia, 3.25% in Peru, and 3.39% in New Zealand).

The TPP region represents an important source of and destination for Philippine trade. The exports of the Philippines to the erstwhile TPP countries account for about 50% of the overall Philippine goods trade. These economies represent nearly 50% of overall Philippine exports and nearly 40% of Philippine imports. Among the other 12 TPP countries Japan and the United States are the major trading partners of the Philippines. In 2015, of the US\$ 128 billion worth of goods traded by the Philippines, 15% was captured by Japan while 13% was absorbed by the United States.

Majority of the Philippines' imports and exports also came from United States and Japan. Trade of the Philippines with TPP countries is shown in Table 1.

In the context of agricultural trade, the TPP participants included major agriculture exporters as well as large consumer markets and impose relatively high agricultural tariffs such as Japan, Malaysia, and Vietnam. Majority of the Philippine cereals imports, particularly rice, and wheat and meslin, are obtained from TPP member countries such as the United States (33.4%), Vietnam (14.4%), Australia (8.6%), and Canada (5.4%). Oil-cake and other solid residues are obtained from the United States (77%). The same is true for the Philippines' top export commodity which is coconut. About 47.7% of total Philippine coconut exports headed to the United States while some 5.6% and 1.4% were imported by Japan and Canada, respectively. Hence, it was expected that increased market access to TPP would have had great impact on Philippine export of these products.

The Trans-Pacific Partnership Agreement would have been a significant FTA for the Philippines and could have eventually become the platform for a broader free trade area, an area that encompasses 11% of the world's people and over 40% of global production.

Table 1. Philippines' trade with TPP countries (value in million US dollars, 2015)

| Country | Phil Exports | % Share in Phil Total Exports | Phil Imports | % Share in Phil Total Imports |
|-------------|--------------|-------------------------------|--------------|-------------------------------|
| Australia | 451 | 0.77 | 845 | 1.20 |
| Brunei | 12 | 0.02 | 7 | 0.01 |
| Darussalam | | | | |
| Canada | 564 | 0.96 | 394 | 0.56 |
| Chile | 39 | 0.07 | 44 | 0.06 |
| Japan | 12,381 | 21.11 | 6,761 | 9.64 |
| Malaysia | 1,199 | 2.04 | 3,305 | 4.71 |
| Mexico | 449 | 0.77 | 101 | 0.14 |
| New Zealand | 46 | 0.08 | 388 | 0.55 |
| Peru | 31 | 0.05 | 27 | 0.04 |
| Singapore | 3,650 | 6.22 | 4,880 | 6.96 |
| Viet Nam | 727 | 1.24 | 1,273 | 1.81 |
| USA | 8,811 | 15.02 | 7,629 | 10.88 |
| TPP Total | 28,360 | 48.36 | 25,654 | 36.57 |
| World | 58,648 | | 70,153 | |

Source: COMTRADE 2017



Transdisciplinary Approach on Natural Resource Management

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Transdisciplinary approach's main objective is to come up with a solution which accounts for the concerns of all sectors and turn them into one perspective.

Table 1. Governability assessment matrix

| | Natural System | Socio-economic system | Governing system | Governing interactions |
|------------|--|---|--|--|
| Diversity | What is the level of biodiversity: species, types of ecosystems or habitats, and the relative abundance and health? | Who are the stakeholders: demographics, organizations, interests, uses, norms and values, etc., and their quality of life? | What is the governing mode: top-down, co-management or bottom-up, and the formal and informal institutions, mechanisms and measures? | What are the existing forms of interactions: communication, participation, representation, etc.? |
| Complexity | How are species, habitats and ecosystems inter-linked, the system productivity, and external pressure? | How do stakeholders interact: conflicting, collaborating, communicating, integrating, specializing, complying, etc.? | How do the goals/visions of the governing institutions relate: differ, compete or cooperate? | How do the forms of interactions add up and relate: mutually supportive, consistent or incomplete? |
| Dynamics | What are the biological and physical changes that take place over time: long-term, short-term, seasonal; main internal and external drivers? | What is the change in the stakeholder composition, values and attitudes over time; main drivers and consequences? | Have there been any changes in the governing institutions, mechanisms and measures; main drivers and consequences? | How adaptive are the forms of interactions? Do they actually transmit information, raising demands and exercising influence? |
| Scale | What is the size and geographical range of the ecosystem; natural boundaries, system of uniqueness and functions? | What is the size and geographical range of the social system; social boundary, ethnic and class division, mobility, uniqueness and functions? | What is the size and geographical range of institutions: local, national, regional, political boundaries, history, uniqueness and functions? | How are interactions channeled within and across scales; from national, regional to local – and vice versa? |

Chuenpagdee R., Jentoft S. 2009. *Governability Assessment for Fisheries and Coastal Systems: A Reality Check*. Hum Ecol Vol 37 pp 109-120. DOI 10.1007/s10745-008-9212-3

Thus, transdisciplinary approach looks at these wicked problems in a way that involves all stakeholders and from the biophysical, socio-economic, politico-institutional, and even at a cultural perspective. Although the approach takes a lot of thinking and planning, the objective is to deal with the problem slowly—dynamic and interactive—but surely, and deal with the problem appropriately. Transdisciplinary approaches are yet to be explored and the fine line between other approaches are yet to be distinguished, but the better part is that it gives people more options and perspective in addressing the wicked problems of the world.

Global challenges faced by mankind are complex. For instance, climate change is not only an issue of reducing greenhouse gases or adaptation strategies, rather, it has implications for biodiversity, market, socio-economics, and politics. In many cases, when things go wrong, scientists tend to look for the root cause, managers look for solutions, while politicians look for someone to blame, and resource users wait for help (Chuenpagdee and Jentoft 2009). One concern in dealing with global challenges is that decision-makers tend to simplify things and haphazardly classify solutions into binary perspective, to succeed or fail.

Interventions may aggravate the situation. For instance, increasing rice production means putting up more irrigation facilities. However, these activities seldom consider the state of the watershed. If the watershed is considered and a reforestation is proposed, this might affect economic activities of upland communities. Rittel and Webber (1973) call these challenges the “wicked problem,” one that is inherently indeterminate, possibly because it is always a part, or a symptom, of a bigger societal problem where there is no right or wrong answer but only good or bad one (Chuenpagdee and Jentoft 2009).

Wicked problems are usually dealt with from a sectoral perspective. The scientific community embarks on multi-disciplinary and interdisciplinary approaches and yet these challenges continue to persist. In many situations of multi-disciplinary and interdisciplinary approaches, the methods used normally aims for solutions of a specific issue, which could affect other systems negatively or positively. Transdisciplinary approach is an emerging perspective which does not just consider what is to be done; rather, the focus is more on the governability of the issue. Governability in this case refers to a measure of how governable a particular system is (Chuenpagdee and Jentoft 2009). This concept is central to the process of change towards better governance of a system (Kooiman et al. 2005). The framework lies within the “interaction” between the “governing system” and the “system to be governed”. Therefore, to make the issue governable, it needs a different kind of information from a collaborative discipline.

Transdisciplinary approaches bring different disciplines together. In looking at one issue, to determine its governability would mean understanding the nitty gritty of the issue, not just its biological characteristics, but also its socio-economic and even institutional and political dynamics. Therefore, a governability assessment matrix includes different dimensions of the wicked problem (Table 1).



Women Empowerment in the Workplace

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March is Women's Month and this 2017, the theme of the celebrations is "**WE Make Change Work for Women!**". As Pacita U. Juan, chair of the ASEAN Women Entrepreneurs Network (AWEN) and of the Women's Business Council of the Philippines (Womenbizph) says, Women's Month is celebrated internationally to make us pause and think about issues, not holidays, and one issue that remains crucial is women empowerment in the workplace.

What does women empowerment mean and why is it important? Erin Crum of smallbusiness.chron.com, states, "Empowerment of women in the workforce means allowing women to have more control over their lives. It also means giving them the freedom to make their own schedules, learn new skills, and gain self-reliance. Empowerment is created when the strengths that women already bring to the company are recognized and utilized." Meanwhile, Leigh Richards, (also of smallbusiness.chron.com) opines, "Employee empowerment has been defined in many ways but generally means the process of allowing employees to have input and control over their work, and the ability to openly share suggestions and ideas about their work and the organization as a whole."

A United Nations Report on Asia and the Pacific countries found that the region is losing between US\$ 42 billion and US\$ 46 billion each year because of restricted job opportunities for women. In addition, women also spend a far greater percentage of their wages on the next generation than men do. So there is almost always a multiplier effect when a woman moves into the workforce. Specifically, they use their income to provide better food, housing, education for their children, and other ways to raise their children's economic prospects.

Research also provided by the United Nations has shown that businesses that promote women empowerment and gender equality are more profitable. Allowing women more power and control in the workplace allows businesses to diversify decision-making, resulting in higher revenue.

A feminist activist based in Lusaka, Zambia, Sara Longwe has developed a method of analyzing gender issues popularly known as *Longwe's Women's Empowerment Framework* in the global feminist and gender literature. The framework identifies four levels of empowerment. These are: welfare, access, conscientisation, participation, and control.

When conscientised, access now pertains to women's access to factors of production, land, labor, credit, training, marketing facilities, and all publicly available services and benefits-on an equal basis with men. Participation is the fourth and crucial stage of empowerment, which enables the collective analysis of gender issues, and the collective commitment to action.

Empowerment seeks a balance of power between women and men, so that neither is in a position of dominance. Empowerment takes place as individual women and groups of women move between levels, gaining strength along the way.

On March 30 and 31, this year, the Philippine Commission on Women conducted a summit as culminating activity of 2017 National Women's Month celebration. The Summit also served as venue for participants to share best practices and challenges in implementing the Magna Carta of Women (MCW) but most importantly to solicit and strengthen the commitment of agencies, local government units and non-government organizations to fully implement the MCW.

Emma Watson in her talk before the United Nations in 2014, said, "It is time that we all see gender as a spectrum instead of two sets of opposing ideals. We should stop defining each other by what we are not, and start defining ourselves by who we are. How can we effect change in the world when only half of it is invited to participate in the conversation? Men, I would like to take this opportunity to extend your formal invitation. Gender equality is your issue, too."



<https://images.search.yahoo.com/search/images;>