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## Collaborative Governance, Decent Work and Innovation: An Analytical Framework for Sustainable Workplaces Based on the Case of Philippine Science and Technology Parks

Jonathan SALE\*

International Society for Labour and Social Security Law

**Abstract**

This paper explores, explains and describes a framework for analyzing collaborative governance, decent work and innovation as fundamental elements of sustainable workplaces through case study of Philippine science and technology (S & T) parks. Rules, or the legal infrastructure, are particularly significant considerations that facilitate or hinder collaboration. Industrial relations/human resource (IR/HR) practices are essential to collaboration and decent work. Employee consultation and labor-management council or committee are examples of IR/HR practices that might contribute to collaboration and decent work in firms and workplaces in S & T parks as they are team approaches to production, too. Collaboration and decent work enhance the capacity to innovate. In the long run, collaborative governance, decent work and innovation tend to converge in the concept of sustainable development. The interdependencies and interactions among collaborative governance, decent work and capacity to innovate in firms operating in S & T parks make possible new solutions to new problems (i.e., innovation) and, thus, sustainable workplaces.

**Keywords**

Philippine science and technology parks, Sustainable workplaces, Collaborative governance, Decent work, Innovation

**1. INTRODUCTION**

What are the fundamental elements of sustainable workplaces in Philippine science and technology (S & T) parks? How are collaborative governance, decent work, innovation, and sustainable development interrelated? This paper explores, explains and describes a framework for analyzing collaborative governance and decent work, and how these can

contribute to innovation, as basic elements of sustainable workplaces via case study of Philippine S & T parks.

Decent work could be part of collaborative governance, and vice-versa. The extent to which there is exchange of information, harmonization of actions, sharing of resources, and enhancement of capacities (Himmelman's elements of collaborative governance) between employers and workers at workplaces, may also influence levels of decent work, and vice-versa. Factors that may contribute to high levels of both collaborative governance and decent work in science and technology parks <Fig. 1> are worth examining. Due to issues of difficult work hours and conditions, lack of meaningful worker voice mechanisms and high turnover rates in Philippine call center and business process outsourcing firms in general, there is a need to undertake a deeper study of workplaces in Philippine S & T parks in relation to decent work. (Sale, 2015a)

\*Correspondence to : Jonathan SALE  
Coordinator of Research, XXII World Congress, International Society for Labour and Social Security Law  
E-mail : jona\_sale@yahoo.com

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Collaborative governance and decent work are important factors that could facilitate innovation. In this regard, it is worth noting that the 2015 United Nations (UN) sustainable development goals numbers 8, 16 and 17 speak of:

- a. decent work,
- b. responsive, inclusive, participatory, and representative decision-making at all levels, and
- c. access to science, technology and innovation.

These suggest that decent work, collaborative governance and innovation might help bring about workplaces that are sustainable.

This paper seeks to describe, investigate, and explain these phenomena that are “little understood” (Creswell, 2007) in relation to Philippine S & T parks. The paper attempts to answer the aforementioned questions through case study of Philippine S & T parks, collecting and inductively analyzing “documents and records” to develop themes from the “bottom-up” (Creswell, 2007).

## 2. COLLABORATIVE GOVERNANCE

How does one determine if collaborative governance, i.e., the extent of exchange of information, harmonization of actions, sharing of resources, and enhancement of capacities, is high or low in Philippine S & T parks?

One approach is via institutional analysis and design. More specifically, this means looking at the action situation and the variables that affect it. Bingham (2011), citing Ostrom (2005), notes categories of information to analyze an action situation:

- a. set of participants
- b. positions to be filled by participants
- c. potential outcomes
- d. set of allowable actions and function that maps actions into realized outcomes
- e. control that an individual has in regards to this function
- f. information available to participants about actions and outcomes and their linkages
- g. costs and benefits

The variables that affect an action situation are: “1) the rules used by participants to order their relationships; 2) the attri-

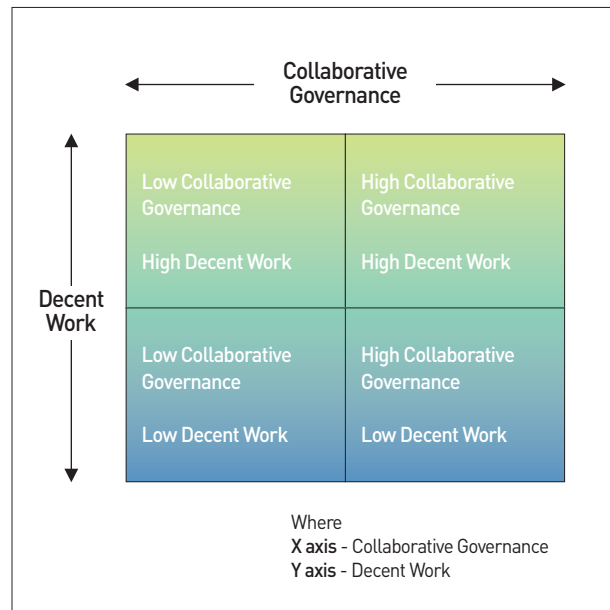


Fig. 1. Collaborative Governance – Decent Work Matrix.

Source: Sale (2015a)

butes of the biophysical world that are acted upon in these arenas; and 3) the structure of the more general community within which any particular arena is placed.” (Bingham, 2011, citing Ostrom, 2005)

“These categories of information provide a means to examine varieties of structure, processes, and models for collaborative governance more systematically.” (Bingham, 2011)

The relationship is illustrated in the following figure <Fig. 2>.

In Philippine S & T parks, is there a high level of collaborative governance, i.e., exchange of information, harmonization of actions, sharing of resources, and enhancement of capacities, in the action situation because of the rules, biophysical world and general community? If so, what are the characteristics or elements of the rules, biophysical world and general community?

Regarding rules, it is important to consider the legal infrastructure and how it impacts on collaboration, if at all.

### 2.1 Legal infrastructure and collaborative governance

“Law may operate to facilitate or constrain collaboration. The term legal infrastructure has been used to refer to a combined system of constitutional, statutory, decisional, and administrative law, taken together with the available institutional enforcement and support mechanisms. . . Statutes may lower

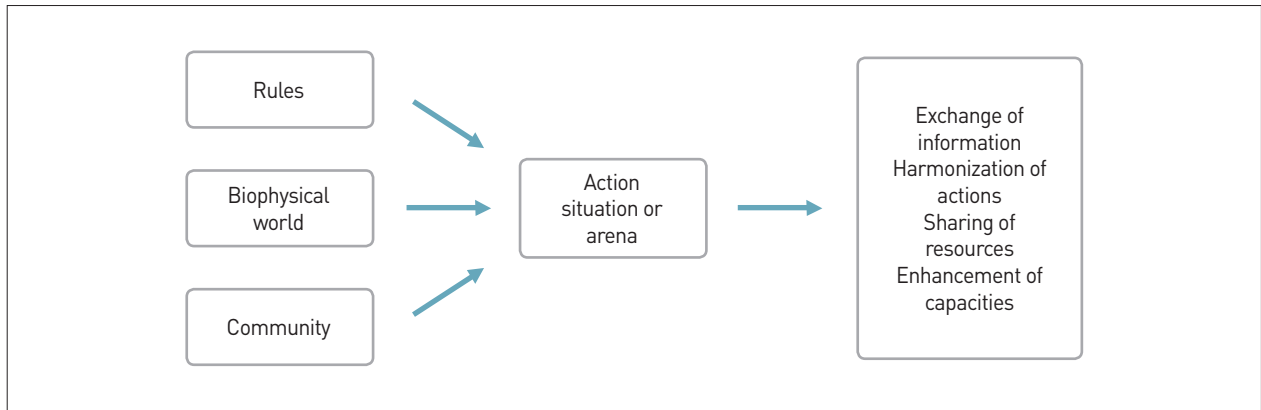


Fig. 2. Variables affecting action situation, and collaborative governance.

Source: Sale (2015d), based on Bingham (2011) citing Ostrom (2005)

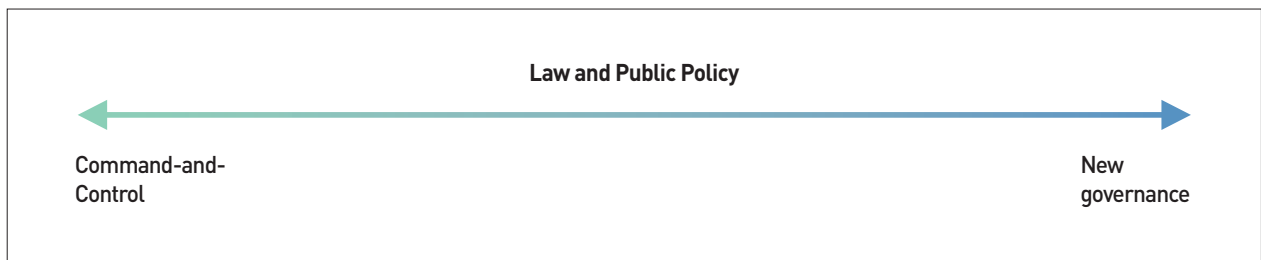


Fig. 3. Law/Public Policy Continuum.

Source: Sale (2015d), based on Bingham (2011)

barriers to collaboration, for example, by authorizing public agencies to do anything together that they have power to do apart... Law is an independent variable: it creates incentives, barriers, or obstacles to collaboration.” (Bingham, 2011)

“Legal scholars have recognized an evolution away from command-and-control hierarchy to the new governance.” (Bingham, 2011) <Fig. 3>

A case in point is the UP – Ayala Land Technohub in the University of the Philippines.

The UP – Ayala Land Technohub is a public-private partnership (PPP) that has helped the University of the Philippines (UP) Diliman Campus generate P351,447,523.20 for twenty-nine (29) proposed renovation projects, many involving

academic buildings of the national university.<sup>1</sup> The amount is UP Diliman’s share of the earnings generated from properties leased by UP to Ayala Land, Inc.<sup>2</sup> (Sale, 2015a)

Quite recently, however, the local government unit of Quezon City where the UP – Ayala Land Technohub is located, has claimed that the national university owes real property taxes to it because UP leased the science and technology park to private developer Ayala Land, Inc. (Sale, 2014)

Under the Philippine Constitution, all revenues and assets of non-stock, non-profit educational institutions used actually, directly, and exclusively for educational purposes shall be exempt from taxes and duties.<sup>3</sup> Subject to conditions prescribed by law, all grants, endowments, donations, or contributions

<sup>1</sup> P351M now available for UPD use. Accessed at [http://upd.edu.ph/~updinfo/jul13/articles/P135M\\_now\\_available.html](http://upd.edu.ph/~updinfo/jul13/articles/P135M_now_available.html).

<sup>2</sup> Ibid.

<sup>3</sup> CONST., art. XIV, sec. 4 (3).

used actually, directly, and exclusively for educational purposes shall be exempt from tax.<sup>4</sup> Also, science and technology are essential for national development and progress.<sup>5</sup> The State shall give priority to research and development, invention, innovation, and their utilization; and to science and technology education, training, and services.<sup>6</sup> The Congress may provide for incentives, including tax deductions, to encourage private participation in programs of basic and applied scientific research.<sup>7</sup> The State shall encourage the widest participation of private groups, local governments, and community-based organizations in the generation and utilization of science and technology.<sup>8</sup> Section 22 of Republic Act 9500, the UP Charter of 2008, also provides that the UP Board of Regents may plan, design, approve and/or cause the implementation of land leases provided that such mechanisms and arrangements shall not conflict with the academic mission of the national university. Under the same section, the Board may approve the implementation of joint ventures, and any plan to generate revenues and other sources from land grants and other real properties entrusted to the national university shall be consistent with the academic mission and orientation of the national university, as well as protect it from undue influence and control of commercial interests. Section 25 of the UP Charter likewise declares that all revenues and assets of the national university used for educational purposes or in support thereof shall be exempt from all taxes and duties.<sup>9</sup> Notably, the Local Government Code of the Philippines also provides that all lands, buildings, and improvements actually, directly, and exclusively used for educational purposes shall be exempt from payment of real property tax.<sup>10</sup> Therefore, the legal infrastructure indicates that education, science and technology are a public good which is the reason for tax exemption or incentive. The legal infrastructure also provides for possibilities of collaboration. (Sale, 2014)

## 2.2 Facilitating/constraining factors and risk management

“Public law is a tool for institutional design; it needs to provide a framework that authorizes collaboration, facilitates broader and more effective use, and preserves accountability

to the rule of law and transparency in government” (Bingham, 2011). The legal infrastructure has created incentives to collaboration. The Philippine Constitution recognizes the significance of education, science and technology and provides tax exemption and incentives. Republic Act 9500 also contributes to collaborative governance as it has enabled the national university to enter into a PPP with the Ayala Land, Inc. and establish the UP-Ayala Land Technohub. As an outcome, it enabled the national university (UP) to generate funds from the lease amounting to P351,447,523.20, which is being used for educational purposes or in support thereof. However, the interpretation of the Local Government Code of the Philippines (Republic Act 7160) is seemingly creating some barriers or obstacles to this collaboration. Citing Republic Act 7160, the Local Government Unit of Quezon City has claimed that the national university owes real property taxes to it and even went to the extent of having the property slated for auction because of its interpretation that the property has been used for proprietary, not educational, purposes. In this sense, the legal infrastructure operates to both facilitate and constrain collaboration because of how it is interpreted. (Sale, 2014)

From the perspective of the national university, these tend to indicate that risk management is needed. Schuppert, citing Budäus and Grüb, proposes a transparency report as a governance instrument <Fig. 4>. (Sale, 2015a) The risk, organizational, performance, and resource reports about the PPP should be able to depict the nature of the relationship and its outcomes. Ideally, the reports should disclose that funds generated are being used by the national university for educational purposes or in support thereof, and that science and technology, which is also a public good under the Philippine Constitution, is being enhanced via the PPP. Overall, the transparency report should demonstrate that the PPP is consistent with the academic mission and orientation of the national university. As a governance instrument, the transparency report should help protect the national university from undue influence and control of commercial interests as required in its charter. In particular, the risk report ought to help reveal legal and other risks, if any. (Sale, 2014)

<sup>4</sup> CONST., art. XIV, sec. 4 (4).

<sup>5</sup> CONST., art. XIV, sec. 10.

<sup>6</sup> Ibid.

<sup>7</sup> CONST., art. XIV, sec. 11.

<sup>8</sup> CONST., art. XIV, sec. 12.

<sup>9</sup> REPUBLIC ACT 9500, sec. 25.

<sup>10</sup> REPUBLIC ACT 7160, sec. 234.

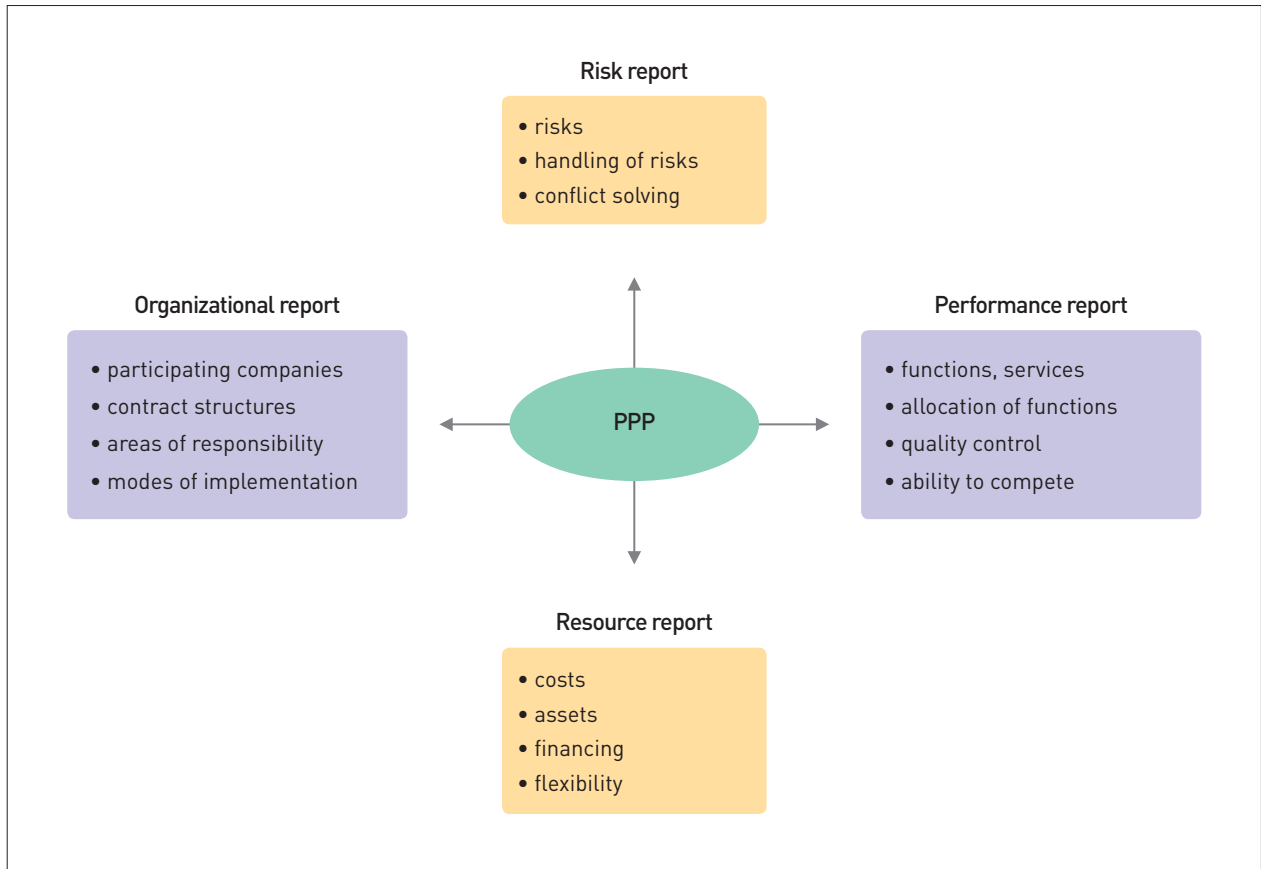


Fig. 4. Elements of transparency report.

Source: Schuppert (2011: 297), citing Budäus and Grüb. See Sale (2015a).

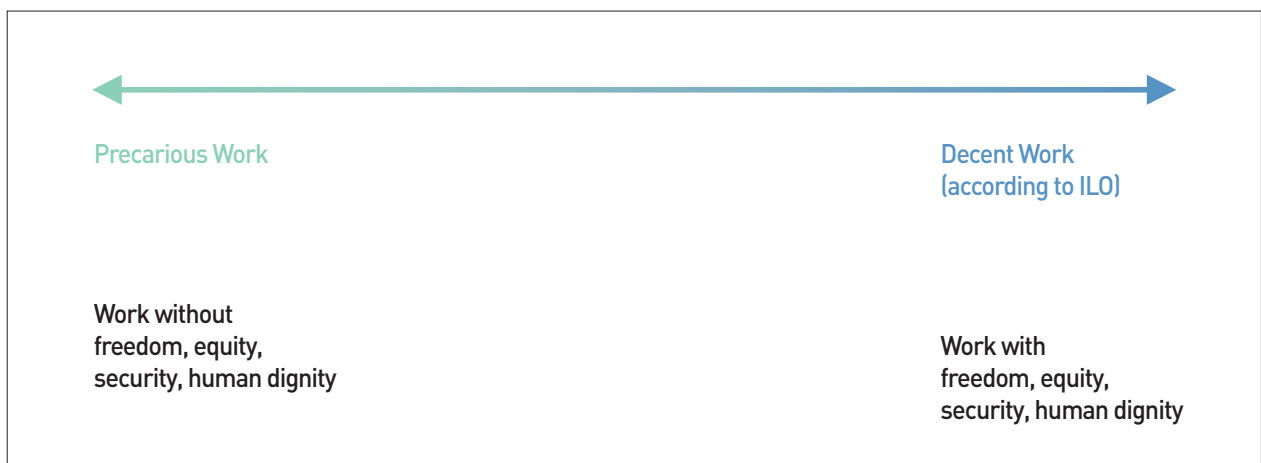


Fig. 5. Work Decency/Precarity Continuum.

Source: Sale (2013, 2015a).

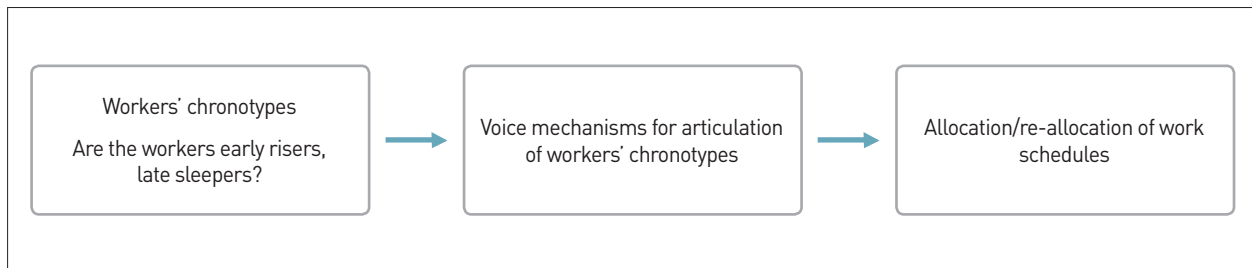


Fig. 6. Chronotypes, Voice and Work Schedules.

Source: Sale (2015d), based on Judda et al. (2013), Sale (2015a).

### 3. DECENT WORK

To the extent that work is carried out with elements of freedom, equity, security, and human dignity, work approximates decent work according to the International Labour Organization (ILO) <Fig. 5>. (Sale, 2003; 2015a)

In Philippine S & T parks, are there rights at work, fair/equitable remuneration, social security and dialogue (Ghai, 2006)?

For example, in the UP-Ayala Land Technohub which is an S & T park in the University of the Philippines as already noted, there are many call center and business process outsourcing firms that operate 24 hours a day, seven days a week. Are the workers in such workplaces consulted regarding their work schedule?

“In related literature, it has been pointed out that ‘social jet lag’ or the disparity ‘between circadian’ (biological) ‘and social (work-enforced) sleep times’ is very wide among shift-workers, which poses a risk for their health and indicates the significance of chronotypes, i.e., whether the shift-worker is an early sleeper and riser or a late sleeper and riser, in devising work schedules (Judda et al., 2013: 142-143, 149). Thus, voice mechanisms at workplaces allowing employers to know workers’ chronotypes, and enabling workers to articulate their chronotypes, can help improve the allocation or re-allocation of shift-work and result in better work schedules.” (Sale, 2015a) These are important especially to Time Zone Dependent (TZD) workers (See Carmel and Kojola, 2012), and call center and business process outsourcing firms employ TZD Workers. (Sale, 2015a; 2015c)

The relationship is illustrated in the next figure <Fig. 6>.

#### 3.1 Consultation

The questions are significant because Philippine law, Republic Act 10151, now requires consultation about night work schedules. The law states: “Before introducing work schedules requiring the services of night workers, the employer shall consult the workers’ representatives/labor organizations concerned on the details of such schedules and the forms of organization of night work that are best adapted to the establishment and its personnel, as well as on the occupational health measures and social services which are required. In establishments employing night workers, consultation shall take place regularly.”<sup>11</sup>

The Implementing Rules of Republic Act 10151 also provide the following: “The employer shall at its own initiative, consult the recognized workers’ representatives or union in the establishment on the details of the night work schedules. In establishments employing night workers, consultation shall take place regularly and appropriate changes of work schedule shall be agreed upon before it is implemented.”<sup>12</sup> “[N]ight worker’ means any employed person whose work covers the period from 10 o’clock in the evening to 6 o’clock the following morning provided that the worker performs no less than seven (7) consecutive hours of work.”<sup>13</sup>

Thus, consultation is a voice mechanism that enables employees to articulate their concerns or issues about night work schedules, if any.

“The aim behind most consultations is . . . to collect informa-

<sup>11</sup> Republic Act 10151.

<sup>12</sup> Department Order No. 119-12, Series of 2012, Rules Implementing Republic Act No. 10151, issued by the Philippine Department of Labor and Employment.

<sup>13</sup> Ibid.

tion, ideas and opinions...and to use this data to help improve policymaking and implementation...and to help reduce the gap between...policymakers and the people” affected by policy (McLaverty, 2011).

### 3.2 IR/HR practices

Verma et al. (1995) have identified key categories of industrial relations/human resource (IR/HR) practices, which they also refer to as employment relations practices. These are work organization, skill formation and development, compensation (levels, forms and structures), employment security and staffing arrangements, and corporate governance.

Work organization involves the determination of how work is organized, that is, “whether work is organized in a narrow, tightly circumscribed ‘Tayloristic’ or ‘job control’ fashion with narrow job descriptions, clear lines of demarcation between individual jobs, and separation of execution of work from supervision” or a “broader, more flexible team- or group- based work system.” An important element related to this is “employee participation or involvement in decision making.” Skill formation and development are about how “employees acquire skills on the job and through the course of their careers.” The “formal and informal training,” and “career progression,” of employees are covered by this category. How employees are compensated is equally significant. Questions about whether compensation is “becoming more ‘flexible’ or ‘contingent’” and “size and degree of change in differentials across classes of employees” are dealt with in this category. Regarding employment security and staffing arrangements, the question of whether “employment is becoming more or less stable over time” or whether permanent or “contingent” employment is “increasing or decreasing” is a central element. The “labour force adjustments” of enterprises and “labour market experiences” of displaced workers are also determined. As to corporate governance, “how” IR/HR policies/practices “fit in” is a primary consideration. Likewise, the articulation of “employee interests,” the “roles, if any” of “unions,” HR “managers, or other processes or institutions,” and “the status of IR/HR as a managerial function” “compared to other managerial functions,” are important factors considered in corporate governance. (Verma et al., 1995)

The themes taken up by Verma et al. in the area of corporate governance are not unlike the topics relating to collaborative governance discussed earlier.

And common to all these IR/HR practices is the metric of employee voice or the employee’s “ability to participate in and affect decision-making.” (Budd and Colvin, 2007)

### 3.3 Labor-management council or committee

In other industries that are also greatly influenced by science and technology like energy, there are labor-management councils or committees. An example in the Philippines is the Hedcor Kabisig Council (Council) established in the Hedcor, Inc., which has won industrial peace awards and citations.<sup>14</sup> Hedcor, Inc. is engaged in generation of renewable energy from river hydropower systems.<sup>15</sup> Through the Council, employees are able to participate in productivity gains-sharing programs. Such programs are aimed at enabling the employees to participate in the gains derived from workplace productivity to which they have contributed through their work efforts and outputs. Via the Council, the employees also contribute to innovation as they are encouraged to generate or develop novel implements, activities, events or programs that enhance systems and processes, leading to more workplace productivity.

Philippine law and public policy are supportive of such programs. Under the Productivity Incentives Act of 1990 (Republic Act 6971), for instance, the labor-management committee is a cooperative/negotiating body in a business enterprise composed of representatives of labor and management created to establish a productivity incentives program (PIP), and to settle disputes arising therefrom (i.e., PIP issues).

Therefore, the labor-management council or committee (LMC) enables workers, unionized or not, to participate in policy and decision making processes at work directly affecting their rights, benefits and welfare. (Sale, 2011) The LMC is composed of representatives of the employer and the employees in equal number.

As held by the Philippine Supreme Court in a labor case: “Indeed, industrial peace cannot be achieved if the employees are denied their just participation in the discussion of matters affecting their rights.”<sup>16</sup>

<sup>14</sup> See <http://ecop.org.ph/hedcor-given-3-special-citations.php>.

<sup>15</sup> Ibid.

<sup>16</sup> *Philippine Airlines v. National Labor Relations Commission*, G.R. No. 85985, August 13, 1993, Decision promulgated by the Philippine Supreme Court.

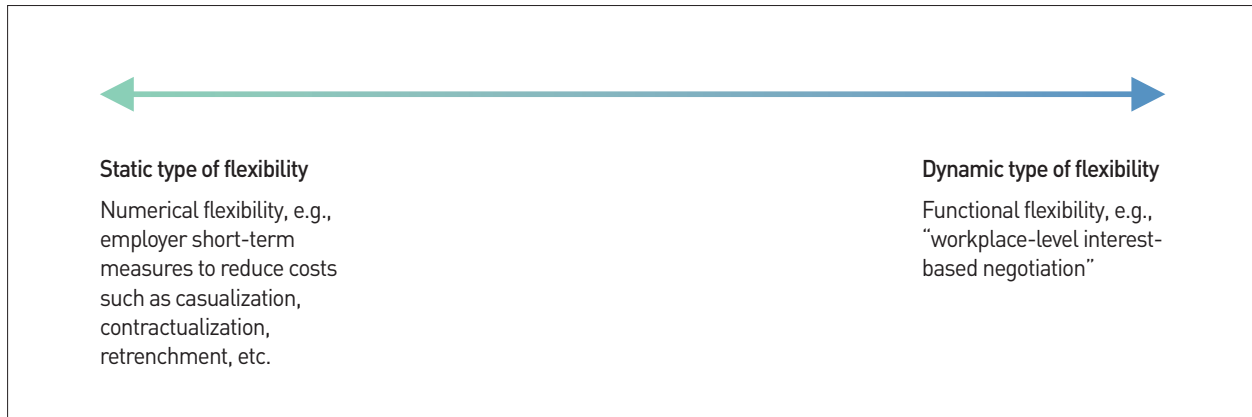


Fig. 7. Flexibility.

Source: Based on Sale and Sale (2014).

### 3.4 Consultation and labor-management council/committee as dynamic approaches

Kuruvilla and Erickson (2002) have noted the significance of flexibility for the competitiveness of firms. They cite two primary forms: functional and numerical flexibility.

Functional flexibility pertains to “how” labor is used, e.g., “changes in work organization and the work process, investments in training and skills development,” “enhancing worker involvement in production decisions,” and “increases in labor-management collaboration.” On the other hand, numerical flexibility refers to “how much” labor is used, i.e., “increased use of casual and temporary labor, subcontracting, layoffs, retrenchments, and other actions that reduce employment security and the number of workers and externalize parts of the production system.” (Kuruvilla and Erickson, 2002)

Like employee consultation, LMC is a form of functional flexibility, which is the dynamic type of flexibility because it allows for “workplace-level interest-based negotiation,” as opposed to numerical flexibility that is the static type of flexibility relying on short-term measures to reduce costs. (Sale and Sale, 2014) <Fig. 7>

Workplaces in Philippine S & T parks could achieve higher productivity through the functional flexibility and dynamism afforded by employee consultation and LMC. Such team approaches to production are much more conducive to innovation.

According to Blair and Stout (1999), the “essence of team production is that the whole can be made bigger than the sum of the parts. But how does that happen?” They have suggested

that “in many instances, it is likely that horizontal interactions among team members may be the most important reason that teams are able to produce more than the sum of their individual inputs” and “are probably an important source of economic gains,” since such “horizontal relationships” involve “collaboration” (Blair and Stout, 1999). In other words, beneficial “horizontal interactions” could take place through employee consultation and LMC.

## 4. INNOVATION

“[G]ood governance also involves the capacity to innovate. Innovation in turn will require means of identifying new problems and finding new solutions to these problems.” (Peters, 2011)

Work environments that have high levels of collaborative governance, i.e., the extent of exchange of information, harmonization of actions, sharing of resources, and enhancement of capacities, and decent work, i.e., work with elements of freedom, equity, security, and human dignity, enhance the capacity to innovate. But the relationship is not depicted here as a linear equation, e.g., collaborative governance + decent work = capacity to innovate. The relationship among them is more complex. Rather, the relationship is characterized by interdependencies and interactions among collaborative governance, decent work and capacity to innovate.

Such a relationship is reflected in the figure that follows <Fig. 8>.



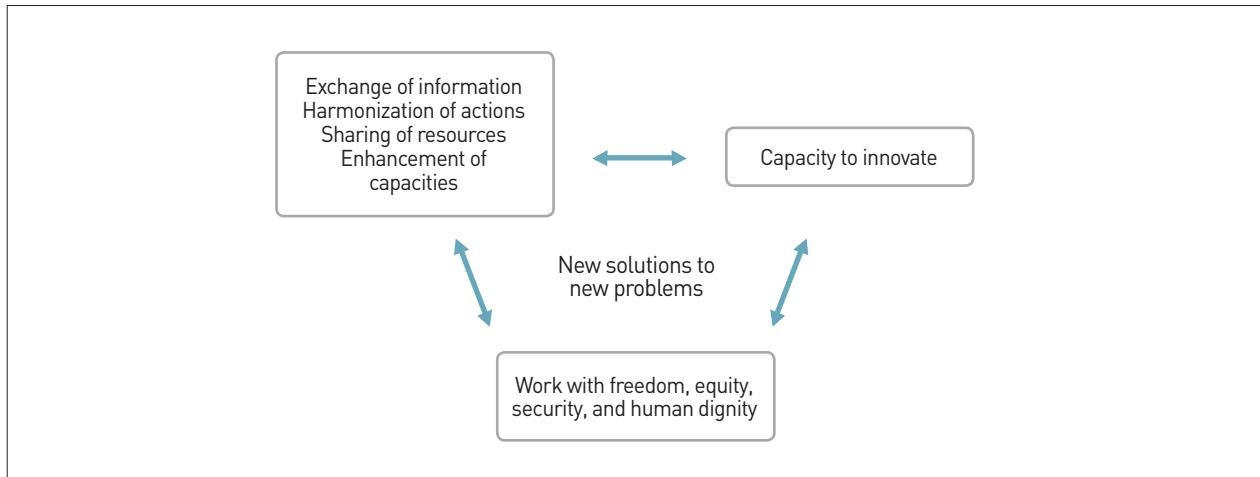


Fig. 8. Collaborative Governance, Decent Work and Innovation.

Source: Sale (2015d), based on Peters (2011).

The interdependencies and interactions among collaborative governance, decent work and capacity to innovate help shape the extent of innovation, i.e., new solutions to new problems, in any organization, including firms in S & T parks in the Philippines <Fig. 8>.

Higher value-added, flexible work organizations, employee involvement (Verma et al., 1995), and S & T workplace productivity are among likely outcomes, too.

As discussed in part 3.3. these are typified by the experience of Hedcor, Inc. through the Hedcor Kabisig Council, a labor-management council that might be regarded as a benchmark for firms operating within Philippine S & T parks.

Ultimately, collaborative governance, decent work and innovation tend to converge in the concept of sustainable development. This is because sustainable development is about governance, positively influencing futures, transforming existing institutions, collaboration among actors, developing knowledge to understand problems and promote innovation, and listening to voices of stakeholders (Meadowcroft, 2011).

S & T workplaces that exhibit such features have the capacity to be sustainable.

## 5. CONCLUSION

This paper explores, explains and describes a framework for analyzing collaborative governance, decent work and innova-

tion in Philippine S & T parks, as basic elements of sustainable workplaces.

The action situation and the variables that affect it are important in studying “varieties of structure, processes, and models for collaborative governance.” Rules, or the legal infrastructure, are particularly significant considerations as they can “facilitate or constrain collaboration.” (Bingham, 2011)

Recognizing that a relationship exists among worker chronotypes, voice mechanisms and allocation of work schedules in workplaces in S & T parks operating beyond eight hours a day and six days a week is an example of a meaningful step towards assuring decent work. Collaboration and decent work enhance the capacity to innovate. The interdependencies and interactions among collaborative governance, decent work and capacity to innovate in firms and workplaces in S & T parks could facilitate new solutions to new problems (i.e., innovation).

In this regard, IR/HR practices in firms and workplaces in Philippine S & T parks as to work organization, skill formation and development, compensation (levels, forms and structures), employment security and staffing arrangements, and corporate governance are crucial strategic factors, according to Verma et al. (1995). A metric that is common to such practices is employee voice at work, as emphasized by Budd and Colvin (2007).

Concrete examples of IR/HR practices that might contribute to productivity and innovation at workplaces in Philippine S & T parks are employee consultation and labor-management

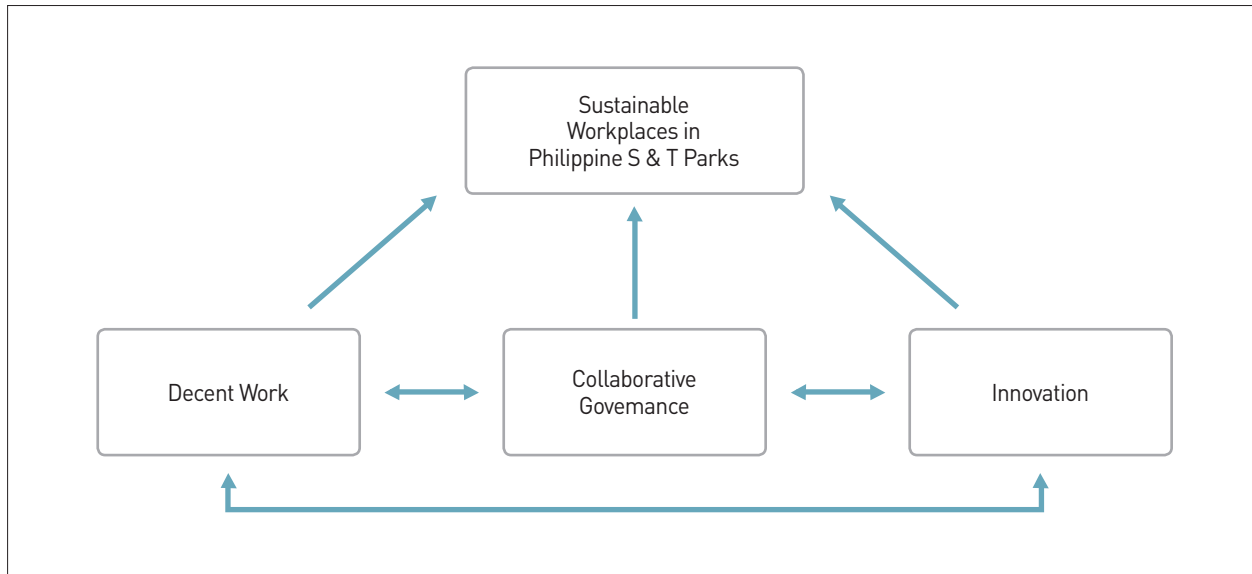


Fig. 9. Inductive analysis of basic elements of sustainable workplaces in Philippine S & T Parks.

council or committee. These are also team approaches to production that entail “horizontal interactions” and “collaboration” (Blair and Stout, 1999).

In the context of the 2015 UN sustainable development goals, therefore, the basic elements of sustainable workplaces in Philippine S & T parks include <Fig. 9>:

- a. decent work which means work carried out under conditions of freedom, equity, security, and human dignity;
- b. responsive, inclusive, participatory, and representative decision-making at all levels which translates to collaborative governance; and
- c. innovation, involving new solutions to new problems.

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