- **Event:** 15th Sustainable Shared Growth Seminar¹
- **2 Hosts:** School of Labor and Industrial Relations (SOLAIR) of the University of the Philippines (UP) and Sekiguchi Global Research Association (SGRA)
- **3 Co-Organizer:** UP College of Architecture, United Architects of the Philippines (Diliman Chapter)
- **4 Date:** February 8, 2013 (Friday)
- **5 Venue:** SOLAIR, Bonifacio Hall, E. Jacinto St., UP Diliman, Quezon City
- **6 Theme:** Manufacturing as if People and Mother Nature Mattered

Brief Description: Manufacturing has the potential to provide Philippine workers and industries with a set of values and skills that would contribute to a high level of craftsmanship, which is referred to by the Japanese as *monozukuri*. Such craftsmanship could then be utilized to enhance the competitiveness as well as the environmental friendliness of Philippine manufacturing. The solid linkages that manufacturing creates in the economy also ensures that any growth that this sector generates would be broadly shared by the economy. This seminar hopes to gather together people from various disciplines, sectors, and even nationalities in an exchange of ideas (conceptual and practical) that would enable the Philippines to achieve sustainable shared growth through manufacturing.

Concept of Afternoon Session: IN SEARCH OF SUSTAINABLE BUILDING MATERIALS

Sustainable Architecture

Sustainable Architecture or Green Architecture is an architectural design approach or philosophy that aims to minimize negative impacts on the environment. Green Architecture promotes efficiency or moderation in the use of energy, building materials, and other resources in the design of the built environment. It deals mainly with the following:

- Sustainable Energy Use,
- o Resource and Waste Management; and
- Sustainable Building Materials.

Sustainable Building Materials

Conventional building materials are often sourced and utilized based on demand, supply, and international market forces. Wood was a favored building material in the Philippines until the mid-20th century because of its availability and relative affordability. Increased demand of

¹The basic objective of this seminar series is to contribute to the research and advocacy on helping the Philippines achieve Sustainable Shared Growth, which refers to a good balance among the three goals of efficiency, equity, and environment. The organizers have come to refer to these goals as Kahusayan, Katarungan, Kalikasan (KKK)

hardwoods as a building material and poor forest management (uncontrolled logging and inadequate reforestation programs) led to shortage and eventual logging ban by the end of the 20th century. Other indigenous materials (e.g. nipa, bamboo, rattan) have also been traditionally used for vernacular architecture but have somehow never evolved or been widely accepted outside of their generally rural use.

Building materials that are considered sustainable include sustainably harvested woods, bamboo (a strong and fast-growing grass with wood-like properties), waste materials such as rice husk/straw that are pressed into panels, rammed earth, and clay. The recycling of materials is also encouraged wherein materials (e.g. old tires, plastics, bottles) are reused for new applications in the construction of a building. Building materials recovered or "reclaimed" from dismantled old buildings is also a widely accepted practice extending the use of woods, stones, etc.

Manufacturing "Home-grown" Building Materials

Manufacturers who subscribe to sustainable technologies also strive to process and manufacture products using as little energy or resources as possible. Building materials today are examined not only in the manner of its fabrication but also in the packaging and delivery of the final product. Hence, it is always preferred that materials are sourced close to the location of the construction. It is advantageous to the country and more beneficial for the environment if building materials are manufactured locally.

It is projected that by 2016, the Philippines will have a housing backlog of 3.6 million.² For many Filipino households, owning a house has remained an elusive dream because of the high cost and the inability to pay for it. The housing backlog should be viewed as a challenge to Architects to design more affordable housing and for manufacturers to develop sustainable materials that are less costly. The construction industry and the production of high quality sustainable building materials both have the added value of providing employment and livelihood opportunities for thousands of Filipinos.

7 Program:

7.1 0830-0900 Registration + Flag Ceremony

7.2 0900-0930 Opening Remarks: Manufacturing and IT zones/parks in the

 $^{2}\,$ Editorial: Reducing the Country's Housing Backlog, Manila Bulletin, December 28, $2011\,$

- Philippines: Impact on poverty, average pay, underemployment, and unemployment. by Dean Jonathan Sale (UP SOLAIR)
- 7.3 0930-1000 Primer on Sustainable Shared Growth (KKK) Seminars and the Middle Income Trap by Dr. Max Maquito (SGRA)
- 7.4 1000-1030 The Growing Vietnamese Economy and Issues for Further Development: A Survey of Vietnamese Firms by Prof. Hitoshi Hirakawa (Nagoya University), Prof. Nguyen Bich Ha (Hanoi Foreign Trade University), Dr. Shin Kawai (Nagoya University)
- 7.5 1030-1100 A Survey of a Sample of Highly Performing Manufacturing Firms in the Philippines: Tracking the Shared Growth DNA by Dr. Max Maquito and (SGRA) and Prof. Hitoshi Hirakawa (Nagoya University), with participation of Mr. Jojo Sobrevega (Toyota Motor Philippines, Philippine Industrial Relations Society)
- 7.6 1100-1130 Import-Substitution in Manufacturing for Sustainable Agriculture by Mr. Ramon Uy, Sr. and Mr. Nonoy Moraca (RU Foundry and Machine Corporation, Ecological and Agricultural Development Foundation, Inc.)
 - 7.6.1 Short comment by Dr. Max Maquito and Dr. Joe Medina (Former Director of UPLB Pahinungod): The Downstream Integrated Radicular Import-Substitution (DIRI) Model
- 7.7 1130-1200 Turning Growth into Jobs: Between the Modern and Archaic Companies by Prof. Benji Teodosio (UP SOLAIR)
- 7.8 1200-1300 Lunch Break
- 7.9 1300-1315 Introduction: In Search of Sustainable Building Materials by Arch.
 Mike Tomeldan (UP College of Architecture)
- 7.10 1315-1335 Bamboo in Architecture by Arch. Rosario Encarnacion-Tan
- 7.11 1335-1355 The Future of Bamboo as a Building Material by Dr. Florentino Tesoro (former Undersecretary of the Department of Science and Technology)
- 7.12 1355-1415 Bamboo in Socialized Housing by Corrina Salzer (Corporate Research and Technology, HLTI)
- 7.13 1415-1445 Panel Discussion (to be participated by Fr. Cesar Vergara of the Gratia Plena Foundation)
- 7.14 1445-1500 Merienda (Coffee Break)
- 7.15 1505-1525 The Housing Backlog: NHA Initiatives by Arch. Benita Ochoa Regala (National Housing Authority)
- 7.16 1525-1545 Green over Gray: Making Cement and Concrete More Sustainable by Arch. Raymond Sih
- 7.17 1545-1610 Panel Discussion (to be participated in by La Farge)

SGRA 15th KKK Seminar Program (as of February 2, 2013)

- 7.18 1610-1640 Ethical Issues in Manufacturing Labor: Research Proposals for the Philippines by Dr. Aliza Racelis (UP Business Administration)
- 7.19 16:40- 1710 Patterns in OFW Flows: In Search of the Giant Leap And Small Step (GLASS) Effect by Dr. Max Maquito (SGRA), with participation of OIC Cherry Joy Veniles, Policy Planning and Research Division, Commission on Filipino Overseas, Office of the President
- 7.20 1710-1740 Closing + Certifications
- 7.21 1740-1930 Post Seminar Get-Together (if needed)

8 Participation Fee:

- 8.1 Full-day participation: 500 pesos (includes lunch and merienda + certificate)
- 8.2 Half-day (PM) participation: 350 pesos (no lunch, includes merienda)