

Grassroots Innovation from the Bottom of the Pyramid

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Abstract

Grassroots innovation is defined as innovative product or process created at the bottom of the pyramid, usually due to necessity, hardship and challenges. This article seek to understand and examine how grassroots innovation creates productive employment. This article briefly explain the role of Yayasan Inovasi Malaysia, a government agency setup to nurture and support scientific innovation, in discovering innovative process and product at grassroots' level.

Key Words: Innovation; grassroots innovation; productive employment

Creating jobs for the population is not an easy task. Foreign investments created abundance jobs during economic boom. During period of economic turbulence and uncertainty, however, existing jobs are being eliminated and lack of foreign investment has reduced the creation of new jobs. Malaysian graduating with their bachelor's degree can't get a job. Employment of Malaysian is becoming more serious as high unemployment will impact the safety and stability of the country. Malaysia realized that sustainable organic/internal growth from within the country is more important compare to foreign investments. Therefore, Malaysian government started several initiatives geared towards inculcating entrepreneurial behavior among Malaysians. Malaysian are now encourage to (1) be an entrepreneur as oppose to working as an employee and (2) become an innovator as oppose to just a user of innovation/innovative product or services. In countries where innovation occurred, there will be an impact on income levels and poverty reduction (Ahmed & Al-Roubaie, 2012). Ahmed and Al-Roubaie further explain that "innovation empowers the economy by increasing productivity, enhancing technological learning and creating knowledge" (2012, p. 85).

The purpose of this article is to briefly explain the role of grassroots innovation in generating productive employment, especially for people living at the bottom of the pyramid. Furthermore, this article analyze how rural Innovation Walk program contribute to productive employment and the commercialization of grassroots innovations.

Productive Employment and Innovation

Employment rate is an important macroeconomic indicator. It is estimated that for 2012 that 65.2% of total number in the Malaysian working age population of 15 to 64 years are economically active (Economic Planning Unit, 2012). On the opposite spectrum, unemployment rate for 2012 in Malaysia is estimated at 3.2% of the labor force (Economic Planning Unit, 2012).

Productive employment contributes to the development of a nation. Malaysia plan to become a high income developed nation through several initiatives such as lifelong learning and innovation. Under the lifelong learning initiative, Malaysian are encourage to sign up for education program regardless of their age, continuously upgrade and improve their skills and knowledge. With such improvement in skills and knowledge, they are able to perform better and therefore eligible for higher salary. As for innovation initiative, Malaysia innovation agenda consists of several well funded programs. In addition, two government agencies has been setup to spearhead innovation activities. First, Agensi Inovasi Malaysia (AIM, *Malaysian Innovation Agency*) was setup to develop the innovation eco-system in Malaysia. Second, Yayasan Inovasi Malaysia (YIM, *Malaysian Innovation Foundation*) was launched on 20th October 2008 with the following objectives ("Yayasan Inovasi Malaysia (Malaysian Foundation for Innovation)," 2012):

- To develop and promote creative skills in the field of science and technology in academia, industry and society.
- To nurture and support scientific innovation at grassroots' level particularly among the youths, women and non-governmental organizations.
- To conduct educational and awareness programmes to enhance appreciation of science and technology at school and grassroots' level.

Main activity of YIM is Innovation Walk organize to scout for innovator from all strata of Malaysian society. In addition to Innovation Walk, YIM also organize Grassroots Innovation Workshop and maintain the National Grassroots Innovation Databank. National Grassroots Innovation Databank was setup "...to recognize, encourage and to celebrate innovation at the grassroots level." ("National Grassroot Innovation Databank," 2012).

The first Innovation Walk was organized in Melaka from 15th of July 2011 to 17th of July 2011 ("Innovation Walk," 2012). Since then, more than ten similar events have been organized throughout Malaysia. Innovative products discovered during these event are documented and highlighted as part of the National Grassroots Innovation Databank project ("National Grassroot Innovation Databank," 2012). Innovative products listed in the databank serve the purpose of recognizing, encouraging and celebrating innovation at the grassroots level ("National Grassroot Innovation Databank," 2012). Furthermore, the database facilitates linkages and networks with investors, promote awareness and possible application of innovative products.

What is Grassroots Innovation?

Human responding hardship and difficulty in life can easily become accidental innovators. Grassroots innovation focuses on individuals as agent for innovation (Bhaduri & Kumar, 2009). Grassroots innovations are innovative product or process created at the bottom of the pyramid, usually due to necessity, hardship and challenges. Bhaduri and Kumar defined grassroots innovators as "...individual innovators, who often undertake innovative efforts to solve localised problems, and generally work outside the realm of formal organisations like business firms..." (2010, p. 29). Mass poor from the grassroots level implements millions of solutions in facing their hardship (Gunu, 2010). In Malaysia, grassroots innovation is one of the high impact programs intended to empower the bottom 40 per cent of the income pyramid (Hashim, 2012). Malaysian's Ministry of Science, Technology and Innovation (MOSTI) initiated the Innovation Walk program to scout for grassroots innovation ("Innovation Walk," 2012). The Innovation Walk program is manage by the Malaysian Innovation Foundation and follow the framework and structure of similar programs established by Professor Anil Gupta who is an expert on grassroots innovation ("Grassroots Innovation Augmentation Network," 2012).

Innovation at the Bottom of the Pyramid

Many researches look at BOP as consumer. This article takes the opposite perspective by looking at BOP as the supplier of ideas for products, processes and services. Since innovation entails the development of new methods more appropriate to local conditions (Ahmed & Al-Roubaie, 2012), it would be better for MNCs to commercialize local ideas for local consumption/market. Furthermore, innovation from the BOP can provide sustainable means of living to the innovators. For example, six out of the 17 innovations that were discovered during Innovation Walk in Melaka have been marked as having high commercialization potential ("Innovation Walk," 2012). Innovation is not confined to large companies and research laboratories but is possible anywhere.

Conclusion

Innovations initiatives require time to materialize. Since the initiative of YIM can still be considered as new, it is not appropriate to evaluate the outcomes of such program. In sum, this article contributes to existing discussions of productive employment and grassroots innovation. This article have argued that grassroots innovation can create opportunity for productive employment.

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