

## GOVERNMENT AND NON-GOVERNMENT SUPPORTS FOR SMALL AND MEDIUM ENTERPRISES (SMEs) IN INNOVATION ADOPTION: A CASE OF INDONESIA

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### Abstract

*This paper attempts to identify supports provided by Government and non-Government agencies in Indonesia. As highlighted in literatures, the characteristics of SMEs are difference to large organizations in particular on their ability to adopt innovation. Based on this fact, the supports should be appropriate for the need of SMEs. Unfortunately, the current Government programs to strengthening local SMEs are still far from their needs in particular to help in their innovation adoption. Non-Government agencies which mainly supported by foreign donors seems better in their strengthening programs for Indonesian SMEs. For instance, the agencies always carry out the training need analysis in order to deliver the appropriate training program for SMEs.*

**Keywords:** *innovation, Government support, SME*

### I. Introduction

Small and Medium Enterprises (SMEs) have been known to contribute significantly to the economies of most countries, including Indonesia. A number of facts indicate that the contribution of SMEs is important to a country's economy. When the economic crisis hit the South East Asian region in 1998, for instance, SMEs, including those in Indonesia, were seen to have a resilient survival capability. Besides the survival ability of SMEs, they also play an important role in employment in Indonesia. SMEs in all sectors employ up to 99.5% of the total work force in Indonesia (BPS, 2003). However, based on share of SMEs export of total export for period 1990s and 2006, Indonesian SMEs' export shown a small contribution compared to other ASEAN countries such as Thailand, Philippines and Vietnam (Tambunan 2009). Further, Tambunan (2009) also pointed out that lack of skilled employees and technology (innovation) hinder Indonesian SMEs to increase their export share contribution.

Innovation is needed by organisations in order for them to compete with competitors. Innovation can be defined as the 'idea, practice, or object that is perceived as new by an individual or other unit of adoption' (Rogers 2003, p. 12). According to O'Regan and Ghobadian (2005), innovation such as new technology affects organisational performance and is critical to competitiveness.

Several supports were given to SMEs in Indonesia, but many of them out of expectation of SMEs. For example, support for the application of soft technology such as TQM were not fit to SMEs' characteristics. The characteristics of SMEs are difference to large organizations in

particular on their ability to adopt innovation. As stated by Drillhon and Estime (1993) that the role of the owner or manager can determine an SME's competitiveness. Compared with large organisations, the role of the owner or manager of SMEs is more crucial, for example, in their decision to adopt innovation and make a strong commitment to it. Moreover, the lack of fund is also believed as main barrier for SMEs to adopt innovation. To overcome the common problem in the innovation adoption, support provided by Government and non-Government agencies is very important. The supports can be in a form of training, consultation, financial loan, and etcetera.

In this paper, a review of Government and non-Government supports for Indonesian SMEs is presented first. This is followed by other countries' experience in innovation support for SMEs. An ideal support for Indonesian SMEs is then concluded.

## II. Literature Review

### A. Government and Non-Government Supports for SMEs in Indonesia

Support from Government and non-Government agencies is important for SMEs, particularly for improving their competitiveness. The support provided by Government is normally in the form of training and financial loans, while support from non-Government agencies, such as universities, large organisations and foreign agencies, normally takes the form of consultation, training and technical assistance. Based on several reports provided by Government and non-Government agencies, there have been - and still are in some cases - programs aimed at strengthening SMEs in Indonesia. The programs were mainly centred on technology transformation, business development and marketing. Hayashi (2003) has summarised the majority of the support provided by Government agencies, which is presented in Table 1.

**Table 1** Summary of policies and programs for the development of SMEs in Indonesia

Category	Year	Details of support
Technology	1969	MIDC (Metal Industry Development Centre) established.
	1974	BIPIK (Small Industries Development) Program established.
	1979	Under BIPIK program, LIK and PIK (Small Industrial estates) established and technical assistance extended to SMEs by UPT (Technical Service Units) and TPL (Extension Field Officers).
	1994	PIKM (Small-scale Enterprises Development Project) established to continuing BIPIK program.
Marketing	1979	Reservation Scheme introduced to protect markets for SMEs.
	1999	Anti-Monopoly Law enacted.
Financial	1973	KIK (Credit for Small Investment) and KMKP (Credit for Working Capital) introduced as government-subsidised credit programs for SMEs.
	1974	KK (Small Credit) administered by Bank Rakyat Indonesia (Indonesian People's Bank) launched and in 1984 changed to Kredit Umum Pedesaan (KUPEDES) scheme (General Rural Savings Program).
	1989	SME loans from state-owned enterprises (1 to 5% benefits) introduced.
	1990	Government-subsidised credit programs for SMEs (KIK/KMKP) abolished and unsubsidised KUK (Credit for Small Businesses) scheme introduced.
	1999	The responsibility of directed credit programs transferred from Bank

	2000	Indonesia (Central Bank) to PNM (State-owned Corporation for SMEs) and Bank Export Indonesia.
	2001*	Major government credit programs for SMEs, including KUK, abolished. Low interest loan for SMEs from Ministry of Industry and Trade at the province level with maximum amount of IDR 50 million was launched.
General	1978	Directorate General for Small-scale Industry established in Ministry of Industry.
	1984	Foster Parent ( <i>Bapak Angkat</i> ) Program introduced to support SMEs.
	1991	SENTRAs (Group of Small-scale Industry) in industrial clusters were organised as KOPINKRA (Small-scale Handicraft Cooperatives).
	1993	The Ministry of Cooperatives started handling small business development.
	1995	Basic Law for promoting Small-scale Enterprises enacted.
	1997	Foster Parent ( <i>Bapak Angkat</i> ) Program changed to Partnership Program ( <i>Kemitraan</i> ).
	1998	Ministry of Cooperatives and Small Business added medium-sized businesses to its responsibilities.
	1998	SME promotion emphasised in People's Economy as a national slogan.
	2003*	Support from Ministry of Industry and Trade in the province level to guide SME in certification on SNI (National Standard of Indonesia) and ISO.

\* This information was obtained by the researcher through interviews with staff of Ministry of Industry and Trade at the Province of East Java

Source: adapted from Hayashi (2003, p. 14)

Meanwhile, non-Government supports are normally from independent agencies either supported by foreign countries or local. For instance, SENADA is an independent agency which supported by the US Government. Other agency known contribute to strengthening SMEs in Indonesia e.g. JICA and PUPUK. JICA is a Japanese agency while PUPUK is a local agency which is not-for-profit independent and non-political private organization. Several programs delivered by non-Government agencies fits to SMEs' needs and characteristics.

Despite the various assistance programs provided by the Indonesian Government, Tambunan (2006) in his research on technology transfer and diffusion in Indonesian SMEs highlighted inappropriate support from Government. He claimed that the support was inappropriate in several aspects including inadequate training being provided to SMEs, funding limitations being placed on the support of the operation of the technical service unit (UPT) and a lack of qualified trainers. These issues were also faced by United Kingdom (UK) SMEs, as reported in a study conducted by Miros and Dale (1996). Some of the UK SMEs in the industrial centre, the researchers claimed, were not helped in grant provision for external training.

SMEs are quite different from large organisations in some aspects, such as the limitation of their resources and funds that can lead to difficulty adopting innovation without support from Government. Given these limitations of SMEs', the Indonesian Government should address these weaknesses by providing appropriate and suitable support for SMEs.

Support from large organisations that have supplier relationships with SMEs is important for improving SMEs' performance. Existing support should be adaptable and include training, and assisting in new programs or technology. Several studies have been concerned with the support provided by large organisations to their suppliers, particularly SMEs. A study conducted by Stamm

and Golhar (1991) shows that large organisations in the US were supporting SMEs to adopt Just in Time (JIT) program. The support mainly focused on sharing expertise and technical know-how in JIT, and facilitating the interchange of knowledge through plant tours and visits. Another study conducted in the US by Forker and Stannack (2000) highlighted the need for supplier development such as technical assistance and educational support to suppliers with the aim of increasing quality performance. The need for supplier development was also stated in a supplier quality management study in Southern China conducted by Lo, Sculli and Yeung (2006). The study confirmed that supplier development, such as technical assistance and the provision of education to suppliers, significantly influenced organisational quality performance. Meanwhile, Calabrese (2000) highlighted the support by car manufacturers for small and medium suppliers in the Italian car industry. Here, the direct support from large organisations for SMEs constituted training at the buyer's location, visits from technicians, basing personnel temporarily at the supplier's premises to improve the process, and technical and financial support for new investments.

The literature suggests that support from large organisations to their suppliers, particularly SMEs, is really helpful in improving the performance of SMEs. Furthermore, the literature suggests that large organisations can be a good source of support for SMEs when they adopt innovation.

### **B. Other Countries' Experience in Innovation Support for SMEs**

There are three aspects discussed in this section: the main support provider in Korea, the extent of support provided for Korean SMEs and the model of innovation support for Korean SMEs.

An important source of information on development of SMEs is the experience of other countries, particularly those that are similar to Indonesia. In Korea for example, SMEs also depend on the support from Government and non-Government agencies, particularly to support them in innovation adoption. This is because SMEs in Korea have similar limitation to SMEs in other developing countries such as Indonesia.

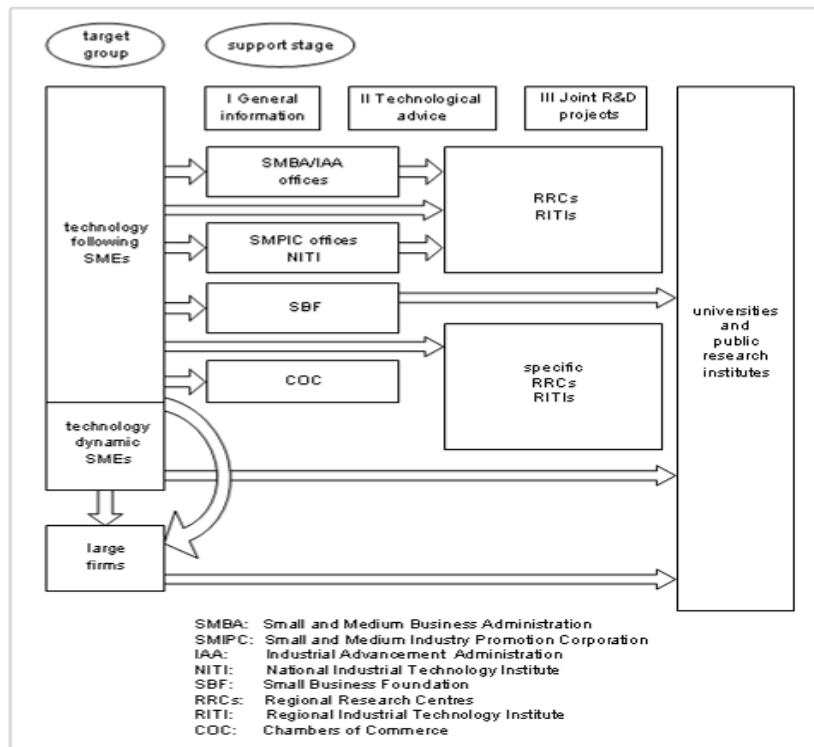
The innovation support from Government and non-Government agencies in Korea is shown in Figure 1. This support was divided into three stages, i.e., general information, technological advice and joint research and development projects (Hwang & Ward, 2001). The non-Government agencies involved were universities and public research institutes. In Korea, the non-Government agencies focus on technical assistance, training programs, information services and research and development collaborative projects.

According to Hwang and Ward (2001), the technical assistance that has been given to 44.1% of 8513 SMEs was provided by the state and public agencies. About 10.7% of 8513 SMEs received assistance from not-for-profit agencies. Meanwhile, 45.2% of 8513 SMEs received assistance from private agencies such as the other consulting firms and companies which have a relationship with SMEs such as parent, supplier and buyers. It is interesting to note that the greatest support for SMEs in Korea was from private agencies.

Appropriate support for SMEs is believed by the researcher to have contributed significantly to the success of Korean products in the global market.

The following section describes some western examples of support programs for SMEs aimed at encouraging innovation.

Kaufmann and Todtling (2002), describe support offered to SMEs by the Austrian Government. Support is in the form of the establishment of regional technology centres as well as direct support for innovation projects. There are six technology centers in Upper Austria, of these Software Park Hagenberg (SWP) and the Research and Training Center for Labour and Technology Steyr (FAZAT) are research-oriented. The SWP is a technology and research center for software development, industrial mathematics and involves a cooperative effort between industry, university departments and technical colleges.



**Figure 1** Innovation support system in Korea

Source: adopted from Hwang and Ward (2001, p. 30)

The other four technology centres mainly function as incubators for new ideas. These centres are: Incubation and Technology Center Wels, Technology Center Linz, Technology Center Innviertel in Braunau and Technology Center Salzkammergut in Lenzing. With regard to support provision, these technology centers focus on providing facilities for small firms in the software development, data processing and consulting services sectors.

Kaufmann and Todtling (2002) commented on the direct financial innovation support for SMEs in Upper Austria. The fund is named as the *Austrian Industrial Research Promotion Fund (FFF)* which is controlled by the Austrian Ministry for Economic Affairs. The main focus of FFF is to support firms in their early phase of innovation process, for example in research and prototype development. The actual support activities targeted to be funded are high technology, very risky R&D projects that represent more than incremental innovations. The FFF uses three types of fund support which are non-repayable grants, low interest loans and guarantees.

Smallbone and Welter (2001) have investigated the support needs of SMEs. In particular, through an empirical survey they highlighted the supports need of SMEs in Central and Eastern European countries. They suggested that for countries at an early stage of development, such as Belarus and Ukraine, the Government should reform the banking and tax system to provide financial assistance. They also assert that in some countries in the region corruption is seriously impeding entrepreneurship and that Governments need to address this issue. They also point to the benefits of direct support for SMEs to strengthen their potential by developing partnerships with

international donors. They suggest that in countries such as Poland, where market reform is more advanced, priorities should be bringing relevant legislation and regulations in line with EU standards and encouraging the banks to facilitate SMEs through their services. Generally, Smallbone and Welter (2001) assert that Government support should focus in upgrading SMEs' competitive advantages.

In the UK, however, some support for SMEs comes from sources other than government. The Shell Technology Enterprise Programme (STEP) which started in 1986 is a good example (Westhead & Storey, 1998). This program was initiated by Shell U.K. Limited and Durham University Business School. The program aimed to influence owners of SMEs' in the UK to become more aware of the benefits of employing graduates.

Kirby and Mullen (1990) listed several opportunities for STEP employers as follows:

- gain valuable technical and commercial assistance for their projects
- explore the opportunities for graduate recruitment
- extend the owner-managers' network of personal contacts by linking the business with an enterprise support agency and a higher education institute
- identify the scope for introducing new skills (such as computing skills) required to enhance the competitive position of the business
- contribute to the development and training of a future labour resource for the business

Further, Westhead and Storey (1998) assessed the contribution of STEP through a survey research project. The key findings of their survey were:

- SME owners were generally satisfied with the program. The most frequently cited areas of the business impacted of the programme were in areas related to information technology, this led to improved decision making in areas like marketing.
- There was increasing monetary contribution to SMEs through programme.
- Helped identified skill shortage in businesses e.g. computer system expertise.
- Contributed to the advancement of technological application in their businesses e.g. use of computer in design, computer-aided production.
- Encouraged host businesses (SMEs) to recruit graduates.

An Australian which had some success in enabling SMEs to adopt new ideas was the National Industry Extension Service (NIES) which was jointly administered by Federal and State Governments (Dwyer, 1987). This service was initiated in July 1986 which focused strengthened Australian SMEs. The aims were providing advice for SMEs for the latest information on management, business planning, manufacturing technology, product innovation strategies, financial sources and so on.

These international examples illustrate that there are some commonalities related to SME support such as arranging appropriate financial incentives to encourage innovation and development. However, it is evident that specific contextual considerations are often of importance, such as the stage of development of SMEs in an economy or the impact of factors like corruption on the growth of innovation.

### **III. Discussion and Conclusion**

This paper is a part of a big research project to develop an implementation framework for innovation adoption for Innovation SMEs. One of the research objectives was identifying the Government and non-Government supports for SMEs in Indonesia. The support can be in a form of training provision, financial loan, technical assistance, consultation and other strengthening programs which is needed by SMEs. However, the supports are still not captured the SMEs needs. It is based from the interview conducted with SMEs in metal sector in Sidoarjo and Pasuruan, East

Jawa. For instance, around 1995 the Ministry of Industry and Trade of Indonesia and Japanese MITI under ASEAN/TQM project introduced the Total Quality Management approach to small and medium industries in Indonesia. However, the TQM approach was not really successful adopted by small and medium industries in Indonesia. There were several reasons laid on this fact based on interviews with SMEs people and Government representative in the Province of East Java, for instance, the lack of TQM training and most training provided was in English or Japanese language; and the absence of consultant to guide them in proper implementation of TQM.

This paper has discussed the supports provided by Government and non-Government in Indonesia. Supports in technology transfer provided by Government seem lower than other supports e.g. financial loan. While in other country, for instance, Korea has developed innovation supports system. The supports are collaboration between Government and non-Government agencies in Korea. Other countries support such as in Austria through *Austrian Industrial Research Promotion Fund (FFF)* which is controlled by the Austrian Ministry for Economic Affairs. The main focus of FFF is to support firms in their early phase of innovation process, for example in research and prototype development. As we can see in the other countries, the support given to the small and medium industries are based on the need of SMEs in their innovation adoption. In Indonesia, the government support is majority under the expectation of SMEs while non-government agencies either local or foreign has showing their ability to grasp what the small and medium industries are actually needed in their innovation/technology adoption.

Based on the earlier discussion, the researcher concluded that Indonesian Government should be able to work together with non-Government agencies in order to deliver necessary programs for SMEs. Other countries' experiences in strengthening the SMEs through innovation adoption are probably the best model to follow. This is based on majority supports provided by Indonesian Government in the past were out of SMEs' expectation. Thus, the current supports should considering the SMEs' characteristics and what they actually require. For instance, in the adoption of innovation, the SMEs should acquire proper training on the innovation itself. The training should be continuous and deliver in Indonesian language. Such technical assistance should also be given because of major barrier of SMEs in innovation adoption are lack in fund so in this case they may not be able to hire consultant as the large organizations do.

Future research should notice the current support provided by Government for the other sectors in particular support emphasize for innovation adoption.

#### IV. References

- [1] Amar, K. (2010), *Development of a Lean Six Sigma Implementation Framework for Small and Medium Sized Indonesian Manufacturing Enterprises*, PhD dissertation, University of Technology Sydney, Sydney.
- [2] BPS 2003, *Jumlah Penyerapan Tenaga Kerja Usaha Kecil, Menengah dan Besar Menurut Sektor Ekonomi Tahun 2000 - 2003*, in C.B.o. Statistics (ed.) Central Bureau of Statistics, Jakarta.
- [3] Calabrese, G. (2000), "Small-medium Supplier-Buyer Relationships in the Car Industry: Evidence from Italy", *European Journal of Purchasing and Supply Management*, Vol. 6, No. 1, pp. 59-65.
- [4] Drillhon, G. & Estime, M.F. (1993), "Technology Watch and the Small Firm", *The OECD Observer*, Vol. 182, pp. 31-34.
- [5] Dwyer, L. (1987), "Science and Technology Policy in Australia: Three Studies", *Prometheus: critical studies in innovation*, Vol. 5 (2), pp. 419-426.

- [6] Forker, L.B. & Stannack, P. (2000), "Cooperation Versus Competition: Do Buyers and Suppliers Really See Eye-to-Eye?", *European Journal of Purchasing and Supply Management*, Vol. 6, No. 1, pp. 31-40.
- [7] Hayashi, M. (2003), *Development of SMEs in the Indonesian Economy*, Report Number Working papers in Trade and Development no.2003/01, ANU, Canberra.
- [8] Hwang, I.P. & Ward, A.E. (2001), "How a developing country supports innovation in its SMEs", *Engineering Management Journal*, Vol. 11, No. 1, pp. 25-33.
- [9] Kaufmann, A. & Todtling, F. (2002), "How Effective is Innovation Support for SMEs? An Analysis of the Region of Upper Austria", *Technovation*, Vol. 22, pp. 147-159.
- [10] Kirby, D.A. & Mullen, D. (1990), "Developing Enterprising Graduates", *Journal of European Industrial Training*, Vol. 14 (2), pp. 27-32.
- [11] Lo, V.H.Y., Sculli, D. & Yeung, A.H.W. (2006), "Supplier Quality Management in the Pearl River Delta", *International Journal of Quality & Reliability Management*, Vol. 23, No. 5, pp. 513-530.
- [11] Miros, B. & Dale, B.G. (1996), "An Examination of the Quality Training Needs of Small Companies", *Total Quality Management*, Vol. 7, No. 3, pp. 309-322.
- [12] O'Regan, N. & Ghobadian, A. 2005, "Strategic Planning - a Comparison of High and Low Technology Manufacturing Small Firms", *Technovation*, Vol. 25, No. 10, pp. 1107-1117.
- [13] Rogers, E.M. 2003, *Diffusion of Innovations*, Free Press, New York.
- [14] Smallbone, D. & Welter, F. (2001), "The role of Government in SME Development in Transition Economies", *International Small Business Journal*, Vol. 19 (4), pp. 63-77.
- [15] Stamm, C.L. & Golhar, D.Y. (1991), "Customer and Supplier Linkages for Small JIT Manufacturing Firms", *Journal of Small Business Management*, Vol. 29, No. 3, pp. 43-49.
- [16] Tambunan, T. (2006), "Technology Transfer and Diffusion among Manufacturing Small and Medium Enterprises in Indonesia", *The Copenhagen Journal of Asian Studies*, Vol. 24, pp. 105-136.
- [17] Tambunan, T. (2009), *SME in Asian Developing Countries*, London: Palgrave Macmillan Publisher.
- [18] Westhead, P. & Storey, D.J. (1998), "Assessing the Contribution of the Shell Technology Enterprise Programme to SMEs in the UK", *Journal of Applied Management Studies*, Vol. 7 (2), No. 2, pp. 239-266.