New Frameworks for Cluster Development

Small & Medium Enterprises Development Authority (SMEDA)
Ministry of Industries
Government of Pakistan

New Frameworks for Cluster Development

(i) Common Facility Centers
Proposed Definition and Evaluation Framework

(ii) Towards a Framework of Cluster Marketing

New Frameworks for Cluster Development

New Frameworks for Cluster Development is a publication of Policy and Planning Division of SMEDA. The purpose of the publication is to contribute towards the body of knowledge and lend knowledge base aid to stakeholders in undertaking cluster development initiatives. The views expressed in this manuscript are those of authors and do not necessarily reflect the views of Small and Medium Enterprises Development Authority.

Small and Medium Enterprises Development Authority (SMEDA)
Ministry of Industries
Government of Pakistan
6th Floor LDA Plaza Egerton Road, Lahore-54000, Pakistan
Ph: 92-42-111-111-456 url: www.smeda.org.pk

Authors

Nadia Jahangir Seth
Deputy General Manager, Human Resources
Small and Medium Enterprises Development Authority, Government of Pakistan

Sami Ullah Bajwa
Assistant Manager, Policy & Planning
Small and Medium Enterprises Development Authority, Government of Pakistan

Muhammad Asif
Assistant Manager, SMEDA Punjab
Small and Medium Enterprises Development Authority, Government of Pakistan

Khuram Shahzad
Assistant Professor
Department of Management
School of Business & Economics
University of Management & Technology, Lahore, Pakistan

Preface

SME Policy 2007, Government of Pakistan, envisaged undertaking measures for development of SME clusters through adequate provision of physical infrastructure, capacity building of sector specific training institutes serving in major clusters, launching of technology up-gradation projects and undertaking initiatives for cluster marketing. Many of these initiatives are now at different stages of implementation. SMEDA, for instance, has initiated 23 physical infrastructure projects for cluster development under Public Sector Development Program. In view of their scope, all such physical infrastructure projects for cluster development do not fall under the definition of a typical 'infrastructure project' which, in both economics and business literature, is limited to road and rail network, sea and dry ports, utilities and industrial estates. To deal with this perplexity, SMEDA and a number of other national and international development agencies use a term “Common Facility Centers” to describe those cluster initiatives which involve physical infrastructure. Common Facility Center (CFC) is, therefore, a commonly used term in development agencies, but there exists no precise definition of CFCs which, consequently, causes the term being over used and ignites vague interpretations. Likewise, there is no comprehensive evaluation framework for CFCs which makes it rather difficult to measure efficiency and effectiveness of these projects. This manuscript aims to deal with both of these issues. It reviews the theoretical underpinnings and practitioners' viewpoint to propose a precise, and indeed very first, definition of Common Facility Centers and a framework for their evaluation.

Cluster marketing constitutes another pillar of cluster development strategy, specified in SME Policy 2007. Cluster marketing, however, seems to be the least priority item in agendas of cluster development agencies. Efforts for marketing of clusters in Pakistan have remained just few and far between during the last couple of years. Interestingly, the situation at global canvas is also not so different. A number of countries have undertaken successful cluster initiatives but somehow cluster marketing practices so far have remained few and orthodox in their orientation. This dearth of cluster marketing initiatives partially rests on the absence of a comprehensive framework of cluster marketing. To fill this gap this manuscript proposes the much need cluster marketing framework. The framework is conceptualized on the basis of contemporary theories like place marketing and cross marketing.

The pioneer work in studying various facets of clusters and outlining field of cluster development has been carried out by Green and White Book of Clusters. *New Frameworks for Cluster Development* takes good note of subject reports and aspires to add further dimensions to this fundamental work. We are confident that the proposed definition and evaluation model of Common Facility Centers and framework for Cluster Marketing will prove valuable to national and international cluster development agencies in formulation and evaluation of physical projects and marketing efforts for development of clusters.

Yousaf Naseem Khokhar
Chief Executive Officer

Contents

Common Facility Centers Proposed Definition and Evaluation Framework

ABSTRACT

Common Facility Center (CFC) is a broadly used term in economic development agencies, to describe infrastructure based projects for development of clusters and small and medium enterprises, but does not have a precise definition in literature. CFC term is sometimes used as an alternative to infrastructure projects – which in both economic and business literature is different than the concept of common facility center – cluster initiatives, hard interventions and physical projects etc. Because of this fuzzy use of the term, no evaluation framework could have been developed so far which has made it rather difficult for policy makers to evaluate effectiveness of CFCs for economic development. To address this issue, this article undergoes the archives of SME development approaches and initiatives to propose a definition and evaluation framework for Common Facility Centers.

INTRODUCTION

In its functional description, Common Facility Center connotes a brick and mortar physical infrastructure project which is undertaken for development of small and medium enterprises (SMEs) in a particular cluster by providing them access to those facilities which due to financial constraints, an individual SME may not be able to obtain. In Pakistan, examples of such projects include Agro Food Processing Facility - Multan, Pakistan Industrial Technical Assistance Center - Lahore, Gujranwala Business Center, Wazirabad Cutlery Institute and Sialkot Sports Goods Center etc. Infrastructure based projects have remained central to cluster & SME development plans of various countries, including Japan, India, Malaysia etc. and international development agencies like United Nations Industrial Development Organization and International Organization for Knowledge Economy and Enterprise Development. Likewise, in Pakistan infrastructure based SME support projects have been a part of the first and subsequent five year development plans of the country. However – be it Pakistan, other countries or international agencies – such infrastructure based projects have not always been labeled as Common Facility Centers. Archives refer to such projects with the names of cluster initiatives, hard interventions,

infrastructure projects, physical projects and common facility centers.

Although, use of multiple terms to describe a phenomenon is customary in virtually all spheres of knowledge, absence of marked terminology and its agreed conceptualization makes it rather difficult to generalize the concept and establish benchmarks to measure performance. The same is true for Common Facility Centers, which neither embrace a precise definition, nor have any comprehensive framework for evaluation. Evaluation of CFCs is essential to provide feedback to policy makers in measuring their effectiveness in achieving broader economic growth and to subsequently pledge more resources towards existing and future CFCs. It is, therefore, imperative to set a precise definition and evaluation framework for Common Facility Centers. This paper attempts to contribute towards both these dimensions. At the outset, it undergoes a meticulous analysis of the emergence and usage of the term CFCs by various countries and development agencies to arrive at a concrete definition. Subsequently, on the basis of theoretical underpinnings, it outlines a comprehensive framework for evaluation of Common Facility Centers.

COMMON FACILITY CENTERS – PROPOSED DEFINITION

Emergence of the Concept

The history of establishing sector specific support projects – especially technical assistance, technology, training and testing centers – is as old as the history of government interventions for industrial and economic development in a country. The phenomenon is deeply rooted in industrial development plans and policy frameworks of countries since decades. According to Organization for Economic Cooperation and Development (OECD), despite an elongated record of initiating aforesaid projects for the purpose of industrial development, the concept attained genuine consideration and appreciation once the notion of Small & Medium Enterprises development received attention in policy realms for economic development in the late 1940's (Möhring & Economic, 2005). Subsequently, various countries established dedicated SME development agencies for initiating targeted policies and plans to facilitate growth of their SME sectors. A systematic review of the approaches implemented by these agencies suggests that the linchpin of SME development strategies includes investment in physical infrastructure, business development services, institutional support, human resources development and technology transfer initiatives.

There has been a continuing paradigm shift in SME development approaches. During 1950's, SMEs were viewed through paternalistic lens (Economy, 2004) and were taken as an entity to be protected, whereas, in the 1980's it was realized that SMEs should be promoted through greater focus on certain key sub-sectors with significant proportion of support and subvention going to technology up-gradation in manufacturing sector (Jain, 2003). In 1990's due to increasing globalization and trade liberalization the paradigm shifted towards gaining competitive advantage (Porter, 1998b) through industrial competitiveness which provoked the thought of practicing cluster development methodology, among government and international business development agencies. In the opinion of practitioners and consultants of SME support institutions, during this period the term CFCs was coined as an alternate term to "Hard Interventions" or "Physical Projects" as one of the tools in itinerary of cluster development methodology.

This paper attempts to define Common Facility Centers through cluster development perspective. Accordingly, it discusses substance and formation of clusters; reviews cluster initiatives and proposition that CFCs are hard intervention programs for cluster development; and draws comparison between infrastructure projects and CFC concept for putting forward a fresh, and indeed very first, definition of Common Facility Centers.

Substance, Formation and Development of Clusters

In economics literature, the dynamics and advantages of geographical concentration were promoted by the work of Marshal (1890) who was the first to suggest that in order to benefit from positive externalities, firms tend to co-locate and this clustering endures affirmative link with economic efficiency. Proximity of firms, involved in similar nature of business, presents the advantages of better access to market and suppliers and thus turns into economic advantage to present firms and an inducement for potential investors to join the group (Harris, 1954; Pred, 1966). It also offers firms better access to information about different actors, including suppliers, customers, competitors, state authorities etc. and thus augments the likeliness of valuable economic exchange between them (Hayek, 1945). Furthermore, as noted by Olson (1965) when firms are clustered, they are in a better position to actively lobby and advocate for safeguarding their common interests. Another important feature of clusters is creation of combined knowledge through economic interactions which leads to innovation (Nordhaus, 1969a). Review of literature, therefore, implies that

clusters facilitate firms, especially of small and medium size, to become competitive by getting benefit of better access to information, specialized resources and rapid adoption of innovation (Enright, 1992).

A major breakthrough in cluster research was made by Michael Porter's book – Competitive Advantage of Nations – which provoked the idea of pursuing a cluster development policy for gaining competitive advantage in the global context. It maintained that in accelerating international trade, only those countries would remain competitive which could exploit strengths of their industrial clusters effectively (Steinle & Schiele, 2002a). Accordingly, Porter presented a framework, called Diamond model, which rests on the proposition that the performance of individual firms depends upon favorable combination of external conditions including demand; factor conditions; related and supporting industries; and context of firm strategy and structure of rivalry between companies in one location (Porter, 1990). Moreover, since these favorable conditions are best met in industrial clusters, industrial policy of the government should focus on strengthening existing clusters and the formation of new ones. He also suggested that government and private sector should dovetail their activities to set up public private partnerships for undertaking collaborative initiatives for development of the clusters (Porter, 1998a).

The last two decades witnessed an increased focus on cluster development interventions by the government and international business development agencies. Contemporary literature terms such conscious actions, taken by various actors to create or strengthen clusters, as Cluster Initiatives and posits that a combined effort by the government and private sector players is crucial for performance and effectiveness of these initiatives (Porter & Stern, 2001; Sölvell, Lindqvist, & Ketels, 2003). In most of the cases, governments undergo a consultative process with stakeholders to conceive the cluster initiative, provide seed money to the project and then assume a steering role while giving lead to the private sector for running these projects. This type of arrangement of managing cluster initiatives is consistent with the spirit of Public Private Partnerships (PPP).

Infrastructure Based Cluster Initiatives

Cluster initiative is a broad term and involves a range of interventions, undertaken for facilitating clusters (Andersson, Serger, Sörvik, 2004). Two well-recognized approaches for cluster initiatives have been presented by United Nations Industrial Development Organization (UNIDO) and International

Organization for Knowledge Economy and Enterprise Development (IKED). In the following discussion, we will review both these approaches to underline incidence and importance of physical projects for cluster development.

UNIDO is considered the flagship organization for undertaking support projects for a number of clusters around the world. Methodology employed by UNIDO for cluster development postulates that cluster initiatives incorporate soft and hard interventions. The term soft intervention demonstrates the trust building measures instigated to promote cooperation among cluster actors while hard interventions are illustrated as initiating physical project for spawning tangible outcomes in terms of cost reductions, productivity enhancement, quality standard etc. for individual firms in a cluster. The hard interventions, or in other words physical projects, attempt to build a level playing field for small and medium level enterprises, which are not capable of emulating specified activities, particularly due to financial constraints. Drawing on this common facility dimension of hard interventions, Ittyerah (2009) proposed the following definition of physical project (hard interventions);

"Legally constituted group or organizations that are involved in different common functional areas collectively serving a cluster or agglomeration of small and micro enterprises involved in the processing and manufacturing of largely similar goods or services"

On the other hand, International Organization for Knowledge Economy and Enterprise Development (IKED) discerns cluster development initiatives into two thematic areas; (i) improvement in cluster dynamics and (ii) improvement in cluster environment (Andersson, Serger, Sorvik, & Hansson, 2004). For improvement in cluster dynamics, it suggests a three tier strategy; encompassing measures for technology & firm growth, inter-actor network creation and cluster formation. Similarly, for improved cluster environment, it proposes a two core approach involving measures to improve factor markets and cluster basis. Table 1 provides a summary of the two thematic areas, respective five strategies and their implementation tools.

Effectuation of these strategies entails establishment of centers or institutions, which essentially are brick & mortar physical infrastructure projects, like facilities to develop new production technologies, cluster specific incubation centers, centers for marketing and other business development services etc. Accordingly it can be construed that physical projects are set up for implementation of the cluster policy for improving cluster dynamics.

Improve Cluster Dynamics			Improve Cluster Environment	
New Technology Firm Growth	**Inter-Actor Network Creation**	**Cluster Formation**	**Factor Market**	**Cluster Basis**
– New Technology – Firm Growth	– Networking – Commercial Cooperation – Joint R & D Projects	– Cluster Analysis – Actions for Engagement and Service Delivery – Cluster Marketing	– Specialized Labor Supply – Specialized Capital Markets	– Legal Framework – Infrastructure – Social Capital – R & D

As explained in the above discussion, both UNIDO and IKED are at concurrence that establishment of physical projects is essential for undertaking cluster development initiatives and probably for this reason, it is observed that measures for SME development in general, and cluster development in particular, eventually lead to establishment of infrastructure based physical projects. However, the term infrastructure, in both economic and cluster literatures, is limited to air, rail & road communication, dry & sea ports and industrial estates etc. (Brailsford et al., 1995). Arguably, in order to avoid this confusion, government and international development agencies use a term Common Facility Center (CFC) to describe those infrastructure based cluster initiatives which do not fall under the precise definition of infrastructure projects. CFC is a widespread term among these agencies, but surprisingly the term has no prevalence whatsoever in contemporary business literature. Moreover, even among development agencies, CFC is not a clearly defined term and is sometimes also used as an alternative to infrastructure projects. While multiple uses of the terms is customary, in virtually all spheres of knowledge, this unstipulated use of the phrase CFC may lead to the term being over used, and ignite vague interpretations. Therefore, there is a need to explain what exactly a common facility center is and how does it differ from traditional infrastructure development projects.

The term infrastructure is universally accepted as a basic evaluator of economic and social development in a country (Fulmer, 2009). Oxford Dictionary defines infrastructure as “a fundamental configuration of necessary facilities and services essential for function of societies and enterprises”. In economics, it is normally described as a composition of interrelated structural rudiments that grant access to the supporting network of development (Sullivan & Sheffrin, 2003). These rudiments include improved road and railway networks, port facilities, access to telecommunication and provision of water, electricity, sewerage and other utilities that enhance economic development in a country.

Availability and accessibility of sustainable infrastructure is considered an essential component for enhancing the potential of small and medium enterprises for their integration and innovativeness in local and global markets (Das, 2007). However, as noted by Das (2007), in addition to generic infrastructural support there is always a need for initiating cluster specific infrastructure projects, for instance technology transfer facilities, industrial & innovation parks, common testing, quality checking & training facilities, etc. IKED framework has also suggested that in order to improve dynamics of clusters, facilities to develop and test new production technologies and processes, centers for technology transfer, cluster based incubators etc. should be established. Although, the aforementioned and other similar projects require establishment of physical infrastructure, these cannot be labeled as infrastructure projects because of two main reasons:

1. These projects do not fall under the prevailing definition of infrastructure projects
2. The projects are aimed specifically for one, or at best for more clusters, and do not pertain to benefit across businesses or general public

This article, therefore, concludes that this perplexity in defining and segregating infrastructure based initiatives for cluster development and regular infrastructure projects has persuaded a number of government and development agencies to describe these projects through an alternate term, Common Facility Centers. The phrase "Common Facility" explains the reason of existence of such projects because the core objective of CFCs is to provide small and medium enterprises access to a pool of services or machinery which individual SMEs cannot afford, because of their financial constraints. In certain cases CFCs do serve more than one cluster and are also run on commercial grounds. On the basis of operational understanding of implementing agencies and the above discussion, we propose the following definition of Common Facility Centers;

"Common Facility Centers are support initiatives that involve a physical infrastructure for development of small and medium enterprises, belonging to one or more clusters, by providing them access to those facilities which would not otherwise be available to individual SMEs."

EVALUATION OF COMMON FACILITY CENTERS – A PROPOSED FRAMEWORK

Performance measurement is undertaken to devise strategies that could enhance performance by looking into the past, the present and the future (Lebas, 1995). It marks the present condition of an organization, helps in developing organizational growth plans, and more importantly prepares blueprints to achieve desired plans. However, performance measurement has always been a multidimensional, complex and problematic phenomenon (Fahy et al., 2000). Researchers have made extensive endeavors to identify suitable and pertinent standards, also called key performance indicators (KPIs), to gauge organizational performance. A set of key performance indicators is used to identify and compare the improvements or discrepancies of performance over a period of time (Cable & Davis, 2004). Conventionally, methods of performance measurement have been more focused on the objective standards such as financial measures; however, due to various shortcomings being carried out by these objective financial measures, the emphasis is now being given to the inclusion of some subjective measures in performance measurement (Amaratunga & Baldry, 2002; Brackertz, 2006; Dess & Robinson, 2006).

Evaluation of CFCs entails measuring performance, comparing it with established standards and in case of variance taking necessary corrective measures. Evaluation is imperative because it provides strategic information regarding causal links between activities and outputs and inter-alia determines efficiency and effectiveness of the projects (Ceglie & Dini, 1999). This feedback assists policy makers to envisage the instrumentality of CFCs in achieving broader economic growth and vis-à-vis pledge more resources to existing and future CFCs (Fox, 2003). Despite this importance, evaluation of CFCs remains a highly understudied area and an exigent task, mainly because of the reasons of resource and expertise scarcity, especially in developing countries, and unavailability of a model for evaluation of CFCs (Andersson, Serger, Sörvik, 2004). The fundamental problem in this regard is lack of required data, as cluster statistics regarding creation of new firms, productivity improvement, innovation stimulation and increase in profits and exports etc. are hardly recorded in developing countries. Secondly the expertise required to study causal links between CFC and existence and growth of clusters is usually not available, making it difficult to study the impact of the CFC.

CFCs do not operate in isolation. They are part of a broader economic environment and therefore generate multi-dimensional outcomes to effect broad ranging economic constituencies of the country. CFCs develop individual firms, create awareness of latest technology and business management practices among the cluster, increase exports, enhance competitiveness, stimulate innovation, generate employment and thus contribute to GDP. In order to assess the impact of CFCs in all these spheres, there must be a comprehensive framework of evaluation. Furthermore understanding of behavioral responses and opportunity costs of various projects, should also be incorporated in evaluation process (DeBresson & Hu, 1999). This complexity in framing the dimensions for evaluation of CFCs and absence of comprehensive framework(s) has led to the dearth of thorough evaluation of CFCs, in majority of the countries of the world (Shapira & Kuhlmann, 2003).

Given that CFCs embrace causal links with number of stake holders, the framework for their evaluation should emerge from wide ranging streams of inquiry. A fundamental step in this regard is to understand that a CFC itself is an institution, or in other words an organization, and being so, the ultimate measure of its effectiveness is its own survival over a period of time (Daft, 2009). Resource based approach suggests that the basic indicator of survival is the ability of an organization to have a sustained access to required resources (Grant, 1991). Resources enable organizations to devise and execute strategies that enhance their competitiveness by increasing their productivity (Barney, 1991). Resources may include all capabilities, firm's attributes, assets, processes, information, knowledge etc. possessed by an organization that enables the organization to achieve its targets efficiently and effectively (Daft & Weick, 1984). Resources are usually classified into three broader categories i.e. physical capital resources, human capital resources, and organizational capital resources. Physical capital resources include technology, plant, and equipment used by an organization along with its geographical location and access to finance and raw material. Human capital resources involve knowledge, experience, training, intelligence, relationships, and insights of organizational members who form and implement various strategies for the smooth and effective functioning of the firm.

Organizational capital resources include the formal reporting structures, controlling and coordination systems that help organizations maintain connection within and between firms in its external environment. Process approach implies that along with obtaining requisite resources, organizations

are expected to function and run their operations effectively (Daft, 2009) and therefore organizational capital resources have to be transformed into institutional capacity of running organizational affairs in a smooth and efficient manner.

Since, as per proposed definition, CFCs main objective is to provide SMEs with those physical infrastructural facilities which small and medium firms independently cannot obtain, we propose that the first dimension of CFC's evaluation should be the ability of the CFCs to successfully acquire inputs or resource, most importantly, financial support and patronage from sponsors, on sustainable basis; and to utilize acquired resources in order to modernize its processes and functions smoothly. Both these indicator groups warrant the survival of CFC as an organization and accordingly it is suggested that at the first and most basic level of analysis, *survival dimension* of CFC effectiveness should be studied.

Immediate beneficiaries of a CFC are small and medium enterprises operating in targeted clusters and therefore, for CFC sponsors, a cogent criterion of evaluation is service delivery to targeted clusters (Boyne, 2003). CFCs provide services to the subject cluster in three different aspects. The first aspect is the ability of a CFC to efficiently provide quality services to those firms which approach them to avail services. Evaluation of this aspect entails the number of firms approaching a CFC and how satisfied they are with its service delivery (Tukel & Rom, 2001). Satisfaction level of beneficiaries determines the level of service quality of CFCs. According to Grönroos (2008) quality is viewed “by the gap between expected quality and experienced quality", or in other words it is a gap between what customer expects and actually receives.

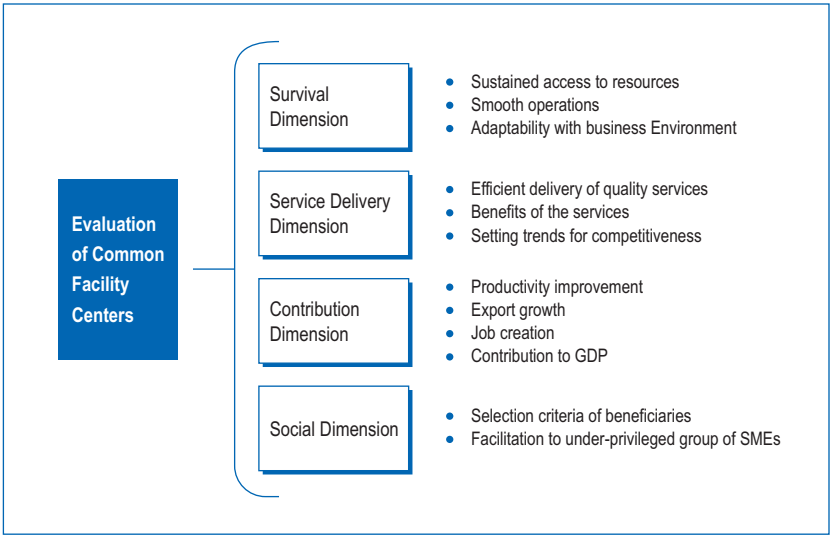
Since these services ultimately aim to make benefiting firms more competitive, second aspect of evaluation is the impact of CFC services on the profitability of these firms. If the service, which may include introduction of new technology or training etc., provided by CFCs succeeds in enhancing competitiveness and profitability of these firms, importance of these services gets proliferated in the entire cluster and creates a demonstrating effect to encourage even those firms who did not get direct facilitation from CFC to access these services from CFCs or open market sources (DeStefano, 1992). In this sense, the third aspect of CFC service delivery is to set a trend for shifting towards new technology or business methods for becoming competitive. Evaluation of CFCs in these three aspects provides basis for second level of analysis, which we propose to call the

service delivery dimension.

Better service delivery of CFC promotes competitiveness in target cluster(s) and thus eventually transforms them into a tool for productivity enhancement, export growth, job creation and contribution to GDP of the country (Munnell, 1992). Productivity takes place through the accumulation of physical, human, and organizational capital resources and through the optimal and efficient utilization of available resources. In Pakistan the overall rate of productivity is not impressive especially in comparison of neighboring countries. The role of CFCs in increasing competitiveness of SMEs in local and international markets is therefore vital. It is pertinent to understand that developing competitiveness among SMEs is directly linked with CFCs own competitiveness. However this does not happen automatically and to achieve sustained competitiveness, organizations have to deploy systems which will monitor and measure productivity enhancements and performance improvements. This perspective spurs importance to evaluate CFC effectiveness in another dimension, the *broader contribution* which links CFCs with global competitiveness of the country – the ultimate goal of cluster development strategy (Porter, 2000). Key Performance Indicators for this dimension could be export growth, job creation, contribution to GDP and productivity improvements by CFC.

As noted before, ideally, CFCs should be setup after consultative processes among stakeholders from both public and private sectors. It has been observed that this participation of private sector in consultation and formation process of CFCs sometimes results in domination of these private sector players on the functioning and services of CFCs. An influential businessman, also involved in consultative process of CFCs, may like to use that CFC for his own vested interests and thus may exclude under-privileged SMEs to obtain benefit from CFC. To avoid this potential problem, CFC managers need to be cautious in selection of beneficiaries with a focus to facilitate those under-privileged SMEs who need support but remain disadvantaged in obtaining the support services (Reijniers, 1994). This dimension may be called as *social dimension* of CFCs.

In purview of above discussion, this paper suggests that for comprehensive evaluation of effectiveness of CFCs, an integrated framework encompassing all four aforementioned dimensions should be employed.



DEFINITION AND EVALUATION OF CFCs – A CASE STUDY OF SMALL AND MEDIUM ENTERPRISES DEVELOPMENT AUTHORITY, GOVERNMENT OF PAKISTAN

Small and Medium Enterprises Development Authority (SMEDA), is the flagship federal government body for development of small and medium enterprises in the country. SMEs constitute the bulk of the economic populace of Pakistan. They constitute 99% of the total economic establishments, contribute 40% to GDP and provide 68% of non-agriculture jobs. Twofold mandate of SMEDA is to provide business development services to SMEs and serve as an advisory body for the federal government in formulation and management of policies with specific reference to SMEs.

SMEDA stepped into the foray of cluster development in 2005-2006, initially in partnership with UNIDO. Comprehensive trainings on methodologies for cluster development and technical support in conducting diagnostic studies of 5 industrial clusters in Pakistan were provided by UNIDO, to concerned SMEDA staff. The program received high appreciation from stakeholders, encouraging SMEDA to include cluster development in its operational strategy. Since then, SMEDA has been engaged in studying value chains of promising clusters and developing cluster profiles, for development of clusters. So far 28 cluster profiles

have been developed. The policy recommendation concluded on the basis of these cluster profiles included development of Common Facility Centers for various clusters. The recommendation was accepted by federal Government and SMEDA was given go-ahead to undertake CFC projects through the financing window of Public Sector Development Program (PSDP), in year 2006-2007.

Over the years, Common Facility Centers have become a hallmark service of SMEDA. Scope of these projects and description of their activities during the last financial year is given below. These projects are conceived in consultation with prominent cluster stakeholders and aim to catalyze the adaptation of best business practices and induction of new technologies through demonstration, training, provision of common facilities and ancillary services. Currently SMEDA has a portfolio of twenty-eight projects with a total financial outlay of Rs. 4.2 billion.

While these projects are at various stages of implantation, SMEDA management is cognizant of the importance of comprehensive evaluation of these projects. As in cases of other development agencies, mentioned above, SMEDA has also been using terminologies like physical projects, PSDP projects and Common Facility Centers. Accordingly, this manuscript is prepared with an objective to develop a concrete definition and evaluation framework for CFCs. Drawing on the proposed evaluation framework, SMEDA is working to develop an instrument for regular monitoring and evaluation of CFCs.

Operational Projects

1. Women Business Incubation Center (WBIC), Lahore

Established in 2007, WBIC provides a secure and peaceful environment for Women Entrepreneurs (WEs) to incubate and develop their businesses. WBIC offers fully equipped offices, exhibition & display facilities, business development services, exposure to networking opportunities and trainings for skill development and capacity building of WEs. So far, as many as 101 WEs have graduated from the Center and 258 WEs have benefitted from the display facility of the Center. During FY 2011-12, around 06 training programs and seminars were conducted. In addition to this, WBIC has facilitated 67 women entrepreneurs to participate in 06 external exhibitions.

2. Women Business Development Center, Peshawar

Women Business Development Center (WBDC) Peshawar aims to serve

women entrepreneurs in the region by providing them with an array of resources and services. The Center provides offices, display facility and training opportunity to WEs. It fosters the development and retention of successful businesses by delivering resources that enable individuals to start new businesses and growth opportunities to the existing ones. During FY 2011-12, 20 Trainings & 14 Seminars were conducted in which 900 WEs participated. WBDC Peshawar also arranged 11 outstation exposure visits, 11 collective exhibitions, 6 solo exhibitions and facilitated another 15 exhibitions for registered WEs of the Center. A total of 215 WEs and 55 enterprising students were registered at WBDC and 17 of these WEs graduated from WBDC during FY 2011-12. In addition, a total of 2,160 existing and potential WEs were served by WBDC for their business needs.

3. Agro Food Processing Facilities, Multan

The main objective of the project is to provide processing facilities for pulp extraction of various fruits like Mango and Guava etc. The project also facilitates local growers to prepare tomato paste/puree and extends its services for value addition and introduction of latest technology in food processing industry. During FY 2011-12, around 1526.77 tons (Mango 1411 tons, Guava 111.34 tons, Peach 4.43 tons) of fruit was processed. Consultancy services were also provided to local growers and processors through seminars/meeting and training sessions.

4. Washing & Pressing Unit, Matta Mughal Khel, Charsadda

This is a Common Facility Center (CFC) providing washing, dyeing and pressing facilities to the local cluster of SMEs. The facility also provides these services to adjoining clusters in the same line of business. During FY 2011-12, two replication models in the cluster were established by the private sector, bringing the number of total replication models to three. A total of 6,000 shawls were processed for SMEs in the cluster during the year.

5. Policy & Project Implementation, Monitoring & Evaluation Unit, Lahore

The objective of the project is to oversee implementation of the SME Policy & PSDP funded projects undertaken by SMEDA. In line with the functions of PPMIEU, research in the shape of SMEDA Research Report Series, SME Development Report and SME Observer was published in 2011-12. On the project side, coordination and revision of project PC-Is as per Planning Commission's guidelines were carried out for on-going projects. In addition, activities related to coordination and progress monitoring of SMEDA's PSDP projects to Ministry of Industries, Planning Commission and other Government

Agencies were provided during the year. In line with the objectives of the project, a two day Training Program on PPRA Rules was organized for the capacity building of project staff during FY 2011-12.

6. SME Subcontracting Exchange, Gujranwala

SME Subcontracting Exchange (SMX) aims at developing inter-firm linkages of small and medium sized manufacturers and vendors with large firms in the light engineering sector in Gujranwala. During FY 2011-12, around 100 vendors and 25 OEMs were brought together through SMX platform for business matchmaking. These vendors have reached at different levels of the OEMs' subcontracting process. Three (3) matchmaking deals amounting to approximately 2.4 million rupees were finalized and a few subcontracting deals are expected to mature shortly. During the year, two major industrial business matchmaking exhibitions were held by SMX. These included Vendor Fair 2011 for auto and industrial part and Opportunities in Defence Equipment Manufacturing facilitating vendors and private and public sector OEMs in the defence industry. 20 vendors from the Gujranwala light engineering sector and representatives of 26 OEMS along with business support organizations participated in the Vendor Fair 2011.

7. Revival of Hyderabad Leather Footwear Center, Hyderabad

The project aims at developing a skilled pool of human resources through offering various training programs in footwear for existing and aspiring workers in the sector. The project is supporting and facilitating the footwear manufacturing cluster through consultancy services and encouraging the growth of new enterprises through business incubators. The project is fully operational and equipped with 51 footwear manufacturing and training machines. During FY 2011-12, the center trained 105 individuals on footwear design, training of trainers on footwear manufacturing was completed, and curriculum of three out of the six modules was developed with the help of consultants.

8. Revival of Cutlery Institute of Pakistan, Wazirabad

Cutlery Institute of Pakistan (CIP) was established in 2008 to facilitate cutlery cluster of Wazirabad. The objectives of CIP are to improve human resource skills by conducting short and long term training programs for semi-skilled persons, BMR/Up gradation of the presently available Common Facility Center, introduction to new technologies and new generation of production tools; and to disseminate awareness on International Certification (Social, Environmental

and Health & Safety), testing and other regulations. During FY 2011-12, training courses for 12 different trades including, cutlery designing, cutlery polishing, cutlery making, machinist & welding etc. were organized for capacity building of the artisans. Around 470 students passed out during the year and 139 students are currently enrolled in the center. CFC Services (around 80 jobs) were also provided to SMEs in the areas of product design, dies/mold fitting, marketing, management, manufacturing and etc.

9. Glass Products Design & Manufacturing Center (GPDMC), Hyderabad

The project was established in collaboration with Sindh Small Industries Corporation, Government of Sindh in Hyderabad near the bangle manufacturing cluster. The project aims at imparting glass products manufacturing skills. The project is successfully providing services in chemical testing, furnace flu gas analysis, design services and training. During FY 2011-12, curriculum for Glass Etching & frosting and Glass Designing & Painting modules was completed, manual for Glass Bead Making module was developed, whereas, SOPs for Physical and Chemical Lab were developed. In terms of services, Flu Gas analysis services were offered to two glass factories. Similarly, chemical testing services have commenced wherein 12 clients were facilitated during the year. GPDMC has also established collaboration with Youth Affairs Department, Government of Sindh to provide training to youth in Sindh. In this regard, a batch of 40 students was trained on Glass Bead Making. Selection of another batch of 60 students for training in Glass Etching and Frosting was completed to be imparted training in collaboration with the Youth Affairs Department.

10. Gujranwala Business Centre (GBC), Gujranwala

Gujranwala Business Centre was established in 2006 in Gujranwala. It provides a single promotional and display platform for a range of products manufactured in Gujranwala in order to attract national and international buyers. During FY 2011-12, as many as 10 Exhibitions were organized. Over 25,000 people visited the exhibitions which include heads of private companies, government officials as well as 18 Ambassadors and High Commissioners of other countries.

11. Khadi Crafts Development Company, Multan

The project aims to enhance competitiveness and productivity and revival of traditional Khadi Industry in Southern Punjab. In FY 2011-12, the company continued its operations wherein fabric produced was supplied for sale at various locations including Utility Stores, Women Business Incubation Centers of SMEDA etc.

Projects-Under Execution

1. Chromite Beneficiation Plant, Khanozai

Chromite Beneficiation Plant has been established as a common facility for the Chromite mine owners and traders in the Khanozai region to get their low grade ore processed from the facility on payment of processing charges. SMEs through the facility are able to get their ores up-graded and sell it at better prices. In 2011-12, civil work for the project was completed. Procurement of machinery was also completed whereas commissioning/installation of machinery was in process. The project will be operational by January 2013.

2. Sialkot Business & Commerce Center, Sialkot

The basic objective of this project is to establish a shared display, meeting and conference facility for SMEs of Sialkot, provision of business development services to small and medium sized exporters serving as a one stop shop for international buyers. During FY 2011-12, grey structure of the building up to the 6th floor was completed. Finishing work and procurement of office equipment and machinery is under way, whereas necessary project staff has been hired.

3. Women Business Development Center (WBDC), Karachi

The WBDC in Karachi is being established in collaboration with the First Women Bank Limited (FWBL) at the City Center in PECHS Karachi. The Center will provide business incubation services, display and exhibition facility, business development services, training and mentoring to new and existing women entrepreneurs in Karachi. SMEDA has also signed an MoU with FWBL to promote women economic empowerment in Pakistan. The Center has started providing training services and would be fully functional by January 2013. Two training programs for women entrepreneurs have already been conducted by the Center in collaboration with FWBL.

4. Sports Industries Development Centre (SIDC), Sialkot

This common facility center was envisaged to enable sports goods sector to adopt new technology of mechanized ball which is threatening the current hand stitched inflatable (mainly soccer) balls. The Center shall provide skilled labor, technology infusion, mold making, proto type development & technical consultancy services. In FY 2011-12, civil work was completed and contract awarded for supply of imported machinery and equipment along with transfer of technology.

5. Foundry Service Center (FSC), Lahore

Lahore is a major manufacturing hub of OEMs for auto parts industry, sugar mills, defense equipment parts and also facilitates nearby industries and foundries of Gujranwala and Faisalabad. A common facility center for foundry cluster was established in 2009 in Lahore, which is equipped with modern technology and comprises main modules of designing, testing and training. Progress made at the project during FY 2011-12 included completion of civil works, hiring of key staff, procurement of machines and equipment along with contract completion for the remaining machinery, procurement of transformer, generator, simulation software and office furniture etc. The project also initiated technical consulting and simulation and design services to the foundry industry during the year.

6. Leather Crafts Development Company, Multan

This project has been developed to add value to the traditional craftsmanship of leather products sector in southern Punjab in order to enhance competitiveness, efficiency, quality and productivity of leather products sector. During FY 2011-12, the company was incorporated with Securities and Exchange Commission of Pakistan. Initial funding for the Company was received. Private partner to implement the project was also identified during FY 2011-12.

7. Red Chilies Processing Center, Kunri

The core benefit to be derived from this project is introduction of mechanical dehydration technology that enhances the quality of dried red chilies and increases the profitability of growers by providing a prompt drying solution during harvesting that starts in the monsoon season. The common facility center shall also be used by local growers and traders to get other agricultural products like onions and garlic dehydrated during off-season. This model project after completion would be the first of its kind in the region, promoting rural industrialization. During FY 2011-12, Rs.25 million was committed for civil works in the form of L/C, whereas L/C for the procurement of plant & machinery was enhanced up to total contract price of Rs.152.1 million. However, funds for the project for FY 2012-13 have not been allocated by the Government.

8. Women Business Incubation Center (WBIC), Quetta

The Center has been set up on the same lines of such Centers established by SMEDA in Lahore and Peshawar. During FY 2011-12, WBIC Quetta undertook a number of initiatives for promotion of women entrepreneurship in the region. Some of the key among these included Eid Mela at WBIC premises where a total

of 20 stalls were put up by WEs attracting around 2,500 visitors to the event. Different stalls setup by women entrepreneurs included readymade garments, bangles, jewelry, gemstones, hand bags, handicrafts, foot wear and food stalls. Approximately 30 female entrepreneurs participated in this festival and had a good exposure in terms of starting and promoting their businesses. The event also resulted in sales of approximately Rs 475,000 for participating entrepreneurs. A one day training program on Skill Development & Women Entrepreneurship was also held during the year.

9. Common Training Facility Center (CTFC) for Light Engineering Cluster, Mardan

This common facility center would provide a platform to start an organized system of youth skill training of the region and increase capacity of SMEs in producing better quality standardized equipment. The CFC shall include machines and equipment with higher capacities than the machines available in the cluster and would directly benefit more than 250 manufacturing units. The cluster is currently producing good quality Rotavators, Cultivators, Shellers, MB Ploughs, Front Blades, Threshers, Drills, Rotary Hoes, etc. This project will be initiated in partnership with Takhtbhai Light Engineering Cluster Association. Building acquisition on rent, hiring of Project staff utility services were acquired for the project during FY 2011-12. The center initiated it services by holding an introductory seminar where 40 members of the cluster participated.

10. Washing, Pressing & Dyeing CFC, Swat

The project aims to establish a common facility in the cluster to provide support to cluster activities in the shape of technical knowhow on the subject to improve their product quality, enhancing local demand and bringing them at par with national standards. During FY 2011-12, a number of project tasks were completed such as land acquisition, staff hiring (for Central Support Unit) etc. However, no allocation has been made for FY 2012-13 for executing the project

11. CFC for Honey Processing and Packaging, Swat

This CFC aims to enhance the productivity, quality and branding of honey and honey by-products. In addition to this, more than 1,200 Bee keeping farmers would be facilitated to commercialize their honey produce with international techniques, which can bring more employment and business opportunities to Swat. It will provide proper honey extracting, processing, cleaning and packing facilities to the honey bee farmers, honey traders and honey exporters at their doorstep. During FY 2011-12, the initial implementation phase of the project

including land acquisition was completed.

12. Women Business Development Center (WBDC), Swat

The center will serve women SMEs of Swat by providing them with an array of resources and services. Eight (8) Business Incubators and Ten (10) display stalls will be made available at the Center. Eighteen (18) women SMEs will be directly utilizing facilities of WBDC at a time. All procurements including hiring of key project staff were completed as the project. An introductory seminar of WBDC Swat was arranged in Swat where a total of 35 WEs and artisans participated. In addition, a Training Session on Small Business Management and Women Entrepreneurship was arranged in Swat where 37 WEs and artisans participated. The Center collaborated with WBDC Peshawar in organizing an exhibition at WBDC Peshawar where seven (7) WEs from Swat participated. An exposure visit to Gems and Jewelry Training and Manufacturing Center Peshawar was arranged for these Wes.

13. Wool Spinning CFC-Islampur, Swat

The technology of power looms is being used in many other clusters; however, Islampur locals still produce their products by using handlooms. This project aims to establish a common facility center providing spinning facilities to the local artisans of the cluster. This project will facilitate more than 250 SMEs. Raw wool purchased by the unit owners will be processed for spinning through this facility. The establishment of this facility would not only result in the timely availability of quality raw material to the weavers but will also increase productivity. Process for procurement and hiring of staff was initiated in FY 2011-12

14. Juice Producing and Packaging Line for Fresh Fruits and Vegetables, Multan

The main objective of this project is to develop infrastructure for the production and packaging of fruit and vegetable juices in line with modern processing technology. During FY 2011-12, the project was registered as a private company with Securities and Exchange Commission of Pakistan.

15. Spun Yarn Research and Development Company, Multan

This projects aims to apply and adapt upgraded technological approach to enhance the value of lint, preserve the waste cotton fibers and to maximize profit of cotton ginners and spinners and to consume the left over waste of ginning industry to produce useful raw material for other uses. In FY 2011-12, Spun Yarn Research & Development Company was incorporated with Security Exchange

Commission of Pakistan.

Projects in the Pipeline

1. Revival of Multani Blue Pottery, Multan

The project aims at reviving the traditional craft of the Blue Pottery sector to protect and preserve the heritage of traditional Multani Blue Pottery. During FY 2011-12, the process for identifying partner from the private sector was initiated. Funds for FY 2012-13, however have not been allocated for the project.

2. Meat Processing & Training Company (MPTC), Multan

This project aims at promoting the optimal utilization of local livestock potential to provide income generating opportunities to the marginalized livestock farmers; especially the rural women. The project would also result in producing trained human resources at their doorsteps. It is expected that the project would result in providing sustainable livelihood and would result in poverty alleviation and judicious utilization of livestock resources in the region. The process of selecting a suitable private partner was underway to implement the project during FY 2011-12.

Annexure

Following is the semi-Structured Interview Questionnaire, based on Proposed Model for Evaluation of Common Facility Centers. The questionnaire is part of the process of developing Instrument for regular monitoring and evaluation of SMEDA CFCs.

1. Do you think targets/goals identified in Project Document (PC 1) are realistic and achievable? If no, explain how?

2. How much achievement has your Project made in terms of targets in PC1?

3. Does your Progress Reporting mechanism reflect achievement as per stated objectives in PC1? If no – explain how?

4. To achieve targets and objectives of the project, provision of human resources and timely availability of funds is essential.
    a. Have you been successful in acquiring Human Resources in time? If no - what are the reasons? (please rank them)
    b. Have you been successful in acquiring Funds in time? If no - what are the reasons? (Please rank them)
    c. Have you been able to get Procurements in time? If no - what are the reasons? (Please rank them)

5. Your project has a specific timeline, after that Government funding of the project will discontinue. Do you think your project would create enough demonstration effect till that time, leaving no need to continue the project?
    a. If yes, do you have any examples to establish your point?
    b. If you think project should continue (even after Government funding is over), what would be the source of funding for this project? Does PC1 of project clearly spell it out? If yes – what is that and do you think that preposition is workable? If PC 1 is not clear on it, what option could you think in this regard?

6. Does the induction of technology (or service) through your project adds value to existing technological/competitive environment of targets industry?
    a. If no; what are the reasons?

b. If yes, how long this technology will remain updated and useful? Would it not be obsolete after some time? Have you done any working in this regard?

7. Are you satisfied with internal procedures for procurement, hiring, approvals etc? If no, identify the problems (please rank them)

8 . Do you feel you have enough financial and administrative powers to make timely decisions and run project affairs smoothly? If no, what are the main problems?

9. Have you been able to extend benefits to SMEs in
   i. Productivity improvement or profit maximization?
   ii. Setting trends for competitiveness
   iii. Any other

   b. Do you maintain any log for this? If no, why don't you do this?

10. Do you maintain database of companies who benefited from you? If not – why?
    a. If it is maintained; is it 100% reliable and can be used to evaluate their satisfaction from your services?
– b. if not, what are reasons for that?

11. Government spends money on PSDP for gaining some economic advantages. Do you have any mechanism to record what contribution your project is making to the economy? Do you have any database of
    i. Productivity improvement
    ii. Export growth
    iii. Job creation, and
    iv. Contribution to GDP; which your project has caused?
    b. If no – why?
    c. Do you need support to develop such system?

12. Critics say, only privileged group of firms remain useful in acquiring services from such PSDP projects? What is your selection criterion of beneficiaries? Do you try to facilitate unprivileged group of SMEs?

REFERENCES

Amaratunga, D., & Baldry, D. (2002). Moving from performance measurement to performance management. *Facilities, 20(5/6)*, 217-223.

Andersson, T., Serger, S., Sorvik, J., & Hansson, E. W. (2004). The Cluster Policies Whitebook, International Organisation for Knowledge Economy and Enterprise Development: Malmo.

Andersson, T., Serger, S. S., Sörvik, J., Hansson, E. W., Schwaag-serger, S., & Kostadinov, I. B. (2004). *The cluster policies whitebook (Vol. 49)*: Citeseer.

Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.

Boyne, G. A. (2003). *Evaluating public management reforms: Principles and practice*: Open Univ Pr.

Brackertz, N. (2006). Relating physical and service performance in local government community facilities. *Facilities, 24(7/8)*, 280-291.

Brailsford, B., Milkovich, S., Prine, D., Fildes, J., Hopwood, T., & Harik, I. (1995). Definition of Infrastructure Specific Markets for Composite Materials: Topical Report. *Northwestern University BIRL Project P93-121 A, 573*, 1995.

Cable, J. H., & Davis, J. S. (2004). *Key performance indicators for federal facilities portfolios* (Vol. 147): National Academy Press.

Ceglie, G., & Dini, M. (1999). *SME cluster and network development in developing countries: the experience of UNIDO*: UNIDO.

Daft, R. L. (2009). *Organization theory and design*: South-Western Pub.

Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of management review*, 284-295.

Das, K. (2007). SMEs in India: issues and possibilities in times of globalisation. *Asian SMEs and Globalization, ERIA Research Project Report*(5), 69-97.

DeBresson, C., & Hu, X. (1999). Identifying clusters of innovative activity: a new approach and a toolbox. *BOOSTING INNOVATION THE CLUSTER APPROACH*, 27.

Dess, G. G., & Robinson, R. B. (2006). Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3), 265-273.

DeStefano, L. (1992). Evaluating effectiveness: A comparison of federal expectations and local capabilities for evaluation among federally funded model demonstration programs. *Educational Evaluation and Policy Analysis, 14*(2), 157-168.

ECONOMY, I. N. A. G. (2004). FACILITATING SMEs ACCESS TO INTERNATIONAL MARKETS.

Enright, M. J. (1992). Why local clusters are the way to win the game. *World link, 5*(4), 24-25.

Fahy, J., Hooley, G., Cox, T., Beracs, J., Fonfara, K., & Snoj, B. (2000). The development and impact of marketing capabilities in Central Europe. *Journal of*

International Business Studies, 63-81.
Fox, M. L. (2003). *Safety nets in transition economies: A primer*: Social Protection, World Bank.
Fulmer, J. (2009). What in the world is infrastructure. *PEI Infrastructure Investor*, 30-32.
Grant, R. M. (1991). The resource-based theory of competitive advantage. *Strategy: Critical Perspectives on Business and Management, 135*.
Grönroos, C. (2008). Service logic revisited: who creates value? And who co-creates? *European Business Review, 20*(4), 298-314.
Harris, C. D. (1954). The, Market as a Factor in the Localization of Industry in the United States. *Annals of the association of American geographers, 44*(4), 315-348.
Hayek, F. A. (1945). The use of knowledge in society. *The American Economic Review*, 519-530.
Ittyerah, A. (2009). Evaluation Study of Micro and Small Enterprises Cluster Development Programme. *Indian Institute of Public administration, New Delhi*.
Jain, P. (2003). *Strengthening Support Structures-The Indian Experience*. Paper presented at the Regional Workshop on Trade Capacity Building and Private Sector Development in Asia, OECD and Government of Cambodia, Phnom Penh.
JAM Reijniers, J. (1994). Organization of public-private partnership projects: The timely prevention of pitfalls. *International Journal of Project Management, 12*(3), 137-142.
Lebas, M. J. (1995). Performance measurement and performance management. *International journal of production economics, 41*(1), 23-35.
Marshall, A. (1890). 1961 Principles of economics: London: MacMillan for the Royal Economic Society.
Möhring, J., & Economic, L. (2005). *Business clusters: promoting enterprise in Central and Eastern Europe*: OECD.
Munnell, A. H. (1992). Policy watch: infrastructure investment and economic growth. *The Journal of Economic Perspectives*, 189-198.
Nordhaus, W. D. (1969). An economic theory of technological change. *The American Economic Review,* 59(2), 18-28.
Olson, M. (1965). *The logic of collective action: public goods and the theory of groups* (Vol. 124): Harvard University Press.
PORTER, M. (1990). The Competitive advantage of nations Houndmills: London.
Porter, M. E. (1998a). *Clusters and the new economics of competition* (Vol. 76): Harvard Business Review Boston.
Porter, M. E. (1998b). *Competitive advantage of nations*: Free press.
Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. *Economic development quarterly*, 14(1), 15-34.
Porter, M. E., & Stern, S. (2001). National innovative capacity. *The global competitiveness report, 2002*, 102-118.

Pred, A. (1966). *The spatial dynamics of US urban-industrial growth 1800-1914*.
Shapira, P., & Kuhlmann, S. (2003). Learning from science and technology policy evaluation: Experiences from the United States and Europe.
Sölvell, Ö., Lindqvist, G., & Ketels, C. (2003). *The cluster initiative greenbook*: Ivory Tower Stockholm.
Steinle, C., & Schiele, H. (2002). When do industries cluster?: A proposal on how to assess an industry's propensity to concentrate at a single region or nation. *Research policy, 31*(6), 849-858.
Sullivan, A., & Sheffrin, S. M. (2003). Economics: Principles in action. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall.
Tukel, O. I., & Rom, W. O. (2001). An empirical investigation of project evaluation criteria. *International Journal of Operations & Production Management,* 21(3), 400-416.

Towards a Framework of Cluster Marketing

ABSTRACT

During the last couple of decades, cluster development has figured prominently in agendas of policy makers as a tool for small and medium enterprise development, in both developed and developing countries. While, many of the initiatives taken in this regard have received success, it is interesting to note that cluster marketing practices have remained orthodox and cluster marketing theory has remained considerably underdeveloped during this period. This paper reviews the theoretical underpinnings of these cluster marketing approaches and establishes that an unorthodox orientation, drawing on marketing basics and interdisciplinary streams of knowledge, is required to develop a much needed cluster marketing framework. It proposes a new cluster marketing framework on the foundations of marketing mix and place-marketing theories. It also discusses the analogies between proposed framework and contemporary theories including Public-Private Partnership, Cross Marketing and Porter's Diamond Model.

INTRODUCTION

A common element among various definitions of cluster is 'geographical concentration of firms'. A typical cluster is formed when firms, involved in similar nature of business, get co-located for gaining advantage of positive economic externalities of a region or area (Hertog & Remoe, 2001). Clusters contribute a great deal towards competitiveness of local industry and therefore development of cluster(s) is considered linked with propensity of a country to remain competitive in the emerging global economy of the world (Morosini, 2004). In the last two decades, there has been an increased focus of government and international business development agencies to embark on interventions for strengthening existing clusters and developing new ones. These interventions include measures for technology up-gradation, firm growth, R&D, cluster analysis, specialized capital markets, infrastructure, social capital and cluster marketing etc. (Porter, 1998c). Review of marketing practices by these cluster development agencies suggests that mainstream efforts for cluster marketing have been orthodox and myopic in most of cases. Therefore, given the instrumentality of clusters in economic development of the country, it is

opportune that fresh perspectives be brought into cluster marketing practices. Since, clusters are fundamentally based in a geography or place, we construe that theory of "place marketing" entails high relevance to clusters and inter-alia can bring the desired fresh perspective to cluster marketing. In this backdrop, this paper aims to study the theoretical underpinnings of cluster and place marketing and subsequently attempts to explore the application of place marketing theory in cluster marketing practices. The paper is divided into three main sections. The first section argues that clusters can be taken as place and theory of place marketing considers place a product which could be marketed through basic marketing tools. Based on this conception, the second section draws on marketing mix to propose the much needed framework for cluster marketing. Finally the third section incorporates analogies between the proposed approach and contemporary theory including Diamond Model by Porter and Public-Private Partnership.

TOWARDS A PLACE PERSPECTIVE IN CLUSTER MARKETING

Importance of Clusters

The industrial agglomeration at geographical locations for attaining localized economies of scope and scale can be traced in economics literature from Adam Smith's (1937) early findings of labour specialization to Marshall's elucidations of why enterprises persist to confine in the same geographical areas (Marshall, 1961; Marshall & Marshall, 1920). According to Marshal (1961), firms incline to co-locate because it enables them to build up a pool of specialized labour force and spawns an ingenious dissemination of ideas and information. This co-location or clustering of firms, involved in similar businesses, provides greater prospects of linkages with markets and suppliers that lead to economic efficiency for existing firms as well as temptation for prospective investors to be part of the group (Pred, 1966). Clustering also provides firms a platform for active lobbying with institutions to protect their widespread mutual interests (Olson, 1965) as well as configuration of collective knowledge which leads to entrepreneurial innovations (Nordhaus, 1969b). It is therefore pertinent that clusters assist firms to turn out to be more competitive (Enright, 1993) through superior access to information, specialized pool of labour, localized resources and early adaptation of locally emanated innovations (Simmie & Sennett, 1999). Besides this efficacy for individual firms, dynamic and robust clusters serve as a tool for competitiveness of a country in global competition and thus contribute

towards economic development of the country (Porter, 1990; Porter, 1996; Steinle & Schiele, 2002b).

Overview of Cluster Marketing Practices

The last two decades observed an escalating prominence of cluster development initiatives by governments and business support institutions. These initiatives involved a wide array of interventions ranging from improving cluster dynamics to overall cluster environment (Andersson, Serger & Sörvik, 2004). The manifestation of cluster initiatives have not just proved successful in increasing economic value in an area (Porter, 1998c) but have also placed a vast array of industries on the world's industrial map as new global partners (Morosini, 2004). This phenomenon of global competition puts extreme pressure on cluster actors to engineer the allure of their cluster and uphold it as an international silhouette, through appropriate marketing and promotion. A number of countries employ tools to promote their respective clusters domestically as well as globally (Andersson, Serger, Sörvik, 2004) to make it a center of attention for skilled professionals, enterprises and foreign investors (MacGregor & Hodgkinson, 2007).

The significance of cluster marketing as an instrument to improve the dynamics of a cluster has been accentuated by both, researchers and practitioners (Andersson, Serger & Sörvik, 2004; MacGregor & Hodgkinson, 2007; Porter, 2000; Sölvell et al., 2003; Zyglidopoulos, DeMartino, & Reid, 2006). However, methodologies and instruments that have mostly been used for cluster marketing have remained prejudiced by Porter's work on Competitive Advantage of Nations (Porter, 1990) because of the reason that the premise of cluster development was promoted in literature by Michael Porter's work. In the following paragraphs we have identified major typologies and their respective tools of cluster marketing which demonstrate that a narrow approach has mostly been implied for cluster marketing and that literature has overwhelmingly discussed and examined marketing of clusters in terms of gaining competitive advantage or attracting inward foreign investment (Kearns & Philo, 1993; MacGregor & Hodgkinson, 2007).

Kearns & Philo (1993) suggested that phenomenon of marketing an industrial cluster should entail economic reasoning (i.e. why firms should be interested to co-locate in an area) as well as social reasoning (i.e. persuading inhabitants to buy from that cluster). They proposed that a location, pool of skilled labour force, infrastructure and business support facilities etc. bunch collectively to form a

product package, which is then marketed. The objective or desired result of cluster marketing proposed by Kearns & Philo is completely aligned with the two other significant approaches presented by Practical Guide to Cluster Development (UK, 2003), also known as DTI Guide, and International Organization for Knowledge Economy and Enterprise Development (IKED) (Andersson, Serger & Sörvik, 2004) . All these three approaches maintain that cluster marketing should aim at attracting inward investment and success of cluster development initiatives. DTI Guide posits that this objective can be achieved by directly promoting the products/services being produced in clusters, cluster branding, highlighting product niches and conducting exhibitions, seminars and cultural events. IKED suggests that cluster marketing can be carried out by the creation of a brand of the region and aggressive cluster promotion.

Following a rather broader perspective, Hongo Tu (2011) noted that cluster marketing involves amalgamation of wide-ranging activities of different cluster players at the macro level for overall success of clusters. Accordingly, he presented a cluster marketing model, focusing on high-tech industrial clusters, which comprises of the following components:

i The Cluster-Brand Cluster Model – Three tiered cluster brands i.e. Cluster Brands, Corporate Brands and Product Brands
ii Channel Network Sharing Model – Networking and co-operation with suppliers and distribution services
iii Leading Enterprise Traction Model – Joining the brand club of monopolistic large enterprises in the cluster
iv Exhibition Promotion Model – Trade Fairs, Industrial Exhibition etc.
v Cooperative R & D Model – Enhancing mutual cooperation with core cluster actors and support institutions
vi The Marketing Alliance Model - Integrating individual enterprises marketing with cluster marketing through Brand Sharing, Business Match Making, Place Promotion, Product Matching etc.

Another stream of literature describes branding as the most effective tool for marketing clusters in today's globalized and chaotic business environment (Zheng & Chen 2006). It suggests that marketing and branding activities for clusters are undertaken at both the regional/local echelon (i.e. assimilating the local activities with cluster marketing and branding, around a common vision and strategy) as well as international/global echelon (i.e. enhancing the

international visibility of clusters through branding).

Table 1: Typologies of Cluster Marketing Practices

Typology	Thematic Area/Models	Key Objectives
Kearns & Philo (1993)	Marketing the location as a Product Package of skilled labor force, infrastructure support, business support facilities etc	– Attracting skilled labor and investment (both local and foreign) for business growth in an area. – Persuading inhabitants to buy
Guide to Clusters DTI Report (2003)	1. Direct Marketing of Particular Cluster 2. Cluster Branding 3. Product Niches 4. Exhibitions, Seminars, Events etc	– Bringing inward investments – Success of cluster development strategies
IKED (2004)	1. Creation of Brand for Region 2. Aggressive Cluster Promotion 3. Target Inward Investment	– To promote an industrial area domestically and globally – Success of cluster policy interventions
Zheng and Chen (2006) & Pro Inno Europe (2010)	1. Collective Marketing 2. Sharing of Channels for Marketing 3. Regional/local level activities 4. International/global level activities	– Expansion of new market horizons for clusters gaining competitive advantage – Creating differentiation of a specific cluster – Cluster marketing and branding – International visibility of clusters
Hongo Tu (2011)	Cluster Marketing Model for High-tech Industrial Clusters 1. The Cluster-Brand Cluster Model 2. Channel Network Sharing Model 3. Leading Enterprise Traction Model 4. Exhibition Promotion Model 5. Cooperative R&D Model 6. The Marketing Alliance Model	– Unification of distinctive activities inside a cluster to accomplish overall goals and objectives – Taking an effective part through collective wisdom and support in highly competitive market practices at macro environment level

However, it is interesting to note that none of these typologies gives attention to identification of customers, segmentation and target market for cluster marketing. In absence of a clearly defined target market, it becomes a daunting task to design market offerings which could deliver value to the potential customers of clusters. Similarly, uncertainty prevails among these approaches

in underlining that marketing efforts should either focus on promoting clusters or on products/services being offered by them. Without target market and other essentials of marketing strategy, including product, pricing, promotional tools etc., cluster marketing efforts remain orthodox and deficient; and highlight the need to bring a fresh perspective in cluster marketing theory.

Cluster – *as Place*

Clusters have been described in different perspectives. Morosini (2004), for instance, looked into clusters in the context of Marshallian theory of industrial agglomeration and illustrated industrial clusters as socioeconomic units which are categorized by a composition of community of people and local trade and industry mediators, confined in a specific area, to work together in order to engender greater portfolio of goods and services in the market. Porter, on the other hand, took a more operational stance and defined clusters as *"geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g. universities, standards agencies, trade associations) in a particular field that compete but also cooperate" (*Porter, 2000, p.197). Clusters have also been viewed as a framework for industrial analysis (Nauwelaers & Wintjes, 2003), as a tool for industrial and economic development (Porter, 1990) and as an instrument for competing in technology intensive global industries (Barkley & Henry, 2001). Despite this diversity of approaches in conceptualization of clusters, place remains a central theme as these definitions coincide that concentration of interrelated firms in a specific location or place is essential for clustering. Accordingly, latest development in the field of place marketing could pave the way of formulation of an applicable framework for cluster marketing.

Place Marketing – *Place as Product*

An important step in understanding place marketing theory is that place, here, does not mean one of the famous 'P – the Place' of marketing mix, rather it connotes a geographical area which is taken as a commodity and is marketed aggressively to attract its targeted customers. The phenomenon of place marketing propagated with the successful marketing efforts of British and French to promote their beaches in early 1900s, which highlighted the importance of considering place as a commodity and marketing it for attracting tourists (Gold & Ward, 1994; Rainisto, 2003). Today, there is an increasing level of competition among places, across the world, to attract visitors and therefore marketing of places has become essential to survive in the emerging global

world (Kearns & Philo, 1993; van den Berg, Klaassen, & Meer, 1990; Witt & Witt, 1995). However, contemporary place marketing theory – as we shall see in the following definition – does not confine place as only a tourist attraction; rather considers it in a much broader prospective.

> *"A place is a nation-state, a geopolitical physical space; a region or state; a cultural, historical or ethic bounded location; a central city and its surrounding populations; a market with various definable attributes; an industry´s home base and a clustering of like-industries and their supplier; a psychological attribute of relations between people."*
>
> *(Kotler, Hamlin, Rein, & Haider, 2002)*

The breadth in contemplation of place implies that potential target market of place marketing could be tourists, new residents as well as entrepreneurs and investors who could be attracted towards a specific place for producing, trading, setting up corporate offices and warehouses etc.; and therefore place marketing would mean developing a place which could meet expectations of its target market, including residents, visitors and investors (Kotler et al., 2002). Although place marketing is not a new concept, very few attempts have been made to theorize it and subsequently develop implementation models (Hankinson, 2004). Most comprehensive and pioneering work in this regard is associated with Kotler et al. (2002) who proposed a three tier framework of place marketing. This framework suggests that the first level of place marketing is figuring out its target markets, followed by a second level which incorporates marketing factors which could be attractions of the place, its people and perceived quality of life. Finally the third level entails a planning group, comprising of citizens, business community and local/state government, which steers the planning and implementation process of place marketing.

Absence of a marked terrain of place marketing gives rise to the use of the concept slackly and invites inclusion of related streams of research in its realm. Accordingly, we observe that place marketing literature takes good note of allied concepts like place development, place selling and place branding etc. A scrupulous review, however, reveals that these concepts are essentially akin to a notion of focusing on place as a commodity and moreover can be considered as branches of place marketing theory. As noted by Rainisto (2003) place selling in essence is an operational orientation of place marketing whereas place

development theory is a more strategic delineation of the concept which envisages nurturing and developing natural and potential traits of a region (Kotler et al., 2002). Similarly, place branding attempts to add attraction to a place and prepare a product offering from a known source having a brand identity (Hankinson, 2005; Keller, Parameswaran, & Jacob, 2011; Moilanen & Rainisto, 2009). We can thus conclude that place marketing and its allied concepts tend to accrue that places could be drawn as products and basic tools of marketing , for instance the 4 Ps, are equally applicable to them (Ashworth & Voogd, 1990; Gold & Ward, 1994).

The proposition that clusters could be taken as place and that place could be considered a product underscores that a cluster, as a whole, can be taken as a product for marketing purposes and that being so, a framework for marketing of clusters can be developed on the foundations of contemporary marketing tools and approaches.

A PROPOSED FRAMEWORK FOR CLUSTER MARKETING

Four-element framework for marketing strategy, commonly known as 4 Ps or Marketing Mix, was introduced by Jerome McCarthy (1694) in early 60's. The practical orientation and applicability of the model for marketing decision earned appreciation from practitioners as well as academics (Kotler, 2007; Webster, 1992) to the extent that now it sometimes is used even as a synonym to the term marketing strategy (Bennett, 1997). The framework is regarded as a major contribution to the evolution of marketing discipline (Ahmed & Rafiq, 1995) and has been a central point of discussion in contemporary marketing concepts like consumer relationship, services, retail, industrial and electronic marketing (Constantinides, 2006). This expediency and acceptability of the 4Ps implies that it can serve as a foundation for the new frameworks for emerging concepts like cluster marketing. As discussed above, cluster marketing is strongly linked to another emerging field known as place marketing, which considers Place as a product and thus attempts to market it through customary marketing tools. In this backdrop, the present article attempts to draw a model of cluster marketing based on the theoretical underpinnings of marketing mix and the theory of place marketing.

Target Market

Theory of cluster marketing mentions that target market of cluster could be investors as well as buyers of the products of that particular cluster, whereas

place marketing considers tourists, new residents and investors as its target market. Interestingly, neither place nor cluster marketing approaches provide basis of segmentation for selecting this target market. Importance of dividing market into segments and selection of specific segment(s) as target market is well established in marketing literature (Dibb, 1998). Underlying assumption of segmentation is the consideration that customer needs have gone diverse and it is no longer possible for companies to go for mass marketing. Therefore, a company can only achieve competitive advantage if it deftly manages this diversity by grouping customers with similar requirements on the basis of certain characteristics and then select an appropriate segment to serve (McBurnie & Clutterbuck, 1988). Importance of segmentation gets even imperative if the product aims to target international market because the intensity of competition raises the significance of understanding core values and needs of the customers (Hassan & Kaynak, 1994) and hence the biggest challenge for marketers turns out to be the identification of global market segments and selection of appropriate segments(s) to be reached (Hassan & Kaynak, 1994). Process of target marketing begins with selection of the variables for segmenting (Philip, 1994) which in case of international customers could be the macro-level geographic, political, economic and cultural data (Helsen, Jedidi, & DeSarbo, 1993) or micro-level product-specific – such as perceived product characteristics (Moskowitz & Rabino, 1994), consumer-specific basis – including lifestyle and values (Boote, 1984; Kamakura & Russell, 1993) or combination of both (Hofstede, Steenkamp, & Wedel, 1999). Since clusters also target international markets, perhaps the most pertinent factor for cluster marketing would be to identify the precise target segments for clusters. While the scope of this manuscript is limited to underline the importance of clearly defining target segments for clusters and draw basic guidelines for selecting target segment, this discussion brings into attention the need to conduct further studies on actionable basis of selecting segments for cluster marketing.

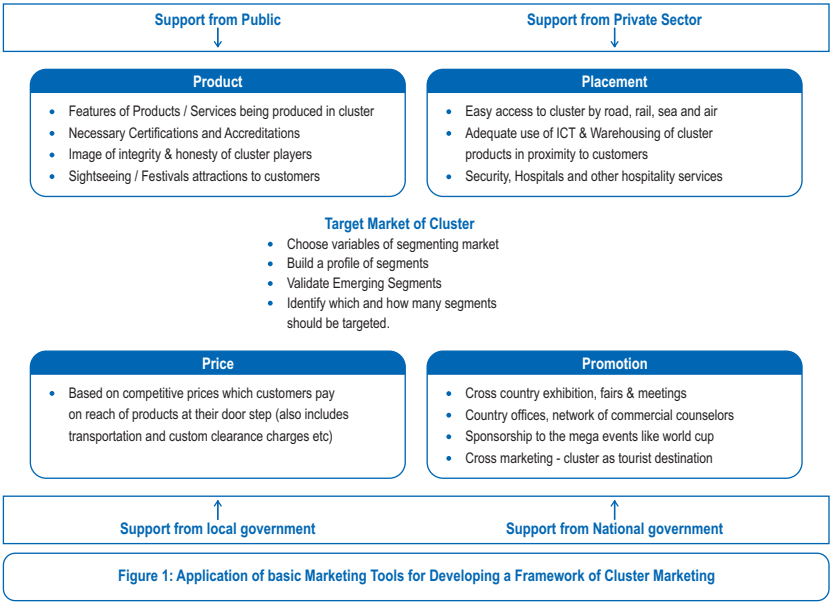


Figure 1: Application of basic Marketing Tools for Developing a Framework of Cluster Marketing

Product

A product connotes combination of good(s) and services which a company offers to its target market for providing solutions to the customer problems (Kotler & Keller, 2003). If a cluster is taken as a product, its core function would be to exceed expectations of its target market in terms of utility of goods & services which customers acquire from the cluster. From the last two decades, ballooning concerns of global warming and corporate social responsibility have sensitized the customers, especially those belonging to the developed part of the world, to prefer those products which are considered environment friendly and are made in adherence to the decree of corporate social responsibility. Accordingly, adoption of environment friendly and socially responsive practices has become another key feature of clusters, instead of a mere formality or marketing tool. Sialkot Sports Goods Cluster in Pakistan is a typical example in this regard. Despite its recognition as a major supplier of quality sports goods, especially soccer balls, to the global market, the cluster reached the verge of closure because of the proliferation of a documentary, which showed customary participation of massive child labor in production processes of the cluster, and subsequent boycott of the cluster products by European nations. Survival of this renowned cluster was possible only when the cluster players showed

compliance to international standards, abolition of child labor and obtained mandatory certifications and accreditations to demonstrate adherence to the environmental and social responsibility laws. The reputation of a socially responsible cluster also adds to the image of integrity and honesty of the cluster players and lends a hand to retain loyalty of existing customers and attract potential customers (Blois, 1999). Besides this, sightseeing or tourist attractions in the whereabouts of clusters, add tourism attraction to the perceived benefits of visiting a cluster by its clientele and in return generate more customer traffic. It has been observed that success of many renowned clusters in the world partially rests on festivals and other tourist attractions in their locality. Therefore presence of sightseeing prospects could be an important variable for the success of a cluster. From a purely place marketing viewpoint, having clusters in proximity of the place to be marketed offers the opportunity of effective cross-marketing for simultaneous promotion of place and clusters. Clusters located in Lahore, provide a real time example of this proposition. Lahore is known as the cultural hub of Pakistan and is included among top tourist attractions of the world. Empirical evidence suggests that international exhibitions & trade fairs organized in Lahore attract more foreign visitors as compared to the exhibitions organized in other parts of the country, with the exception of Karachi – which itself is one of the known metropolitan cities of the world.

Price

Price is the value which customers pay to the organization in return to the value that they acquire through its goods or services (Kotler & Keller, 2003). Despite, that pricing is reckoned as one of the main determinants of marketing strategy (Stöttinger, 2001), majority of the studies on international marketing approach appear to somewhat undermine the application of pricing, having more focus on other aspects (Myers & Turnbull, 2012; Shenker, Clark, Estrin, & Herzog, 1996; Tzokas, Hart, Argouslidis, & Saren, 2000). However, increasing globalization has raised the need to realize that export marketing practices stay, to the great extent, on pricing strategy (Cavusgil, Chan, & Zhang, 2003). In international trade, customers pay prices in terms of money to suppliers, transportation and custom clearance charges, financial costs for delivery time and risks involved in the transaction. Given that primarily clusters aim to target international markets, cluster players should have a clear understanding of the rates of all these features in comparison to their competitors, operating in clusters of other countries. For instance, companies belonging to Pakistan Sports Goods cluster should set their prices on the basis of the total price which customers will have to

pay in case they opt to purchase from another sports goods cluster, located in any other part of the world.

Place

A place, in essence, is outreach of the firm(s) through which it reaches out its customers (Gertner & Kotler, 2004). Understandably the placing efforts for distribution of the products have had a tilt towards whole sellers, distributors and retailers. However, the invasion of dotcom business and ballooning use of Information and Communication Technologies (ICT) has unleashed new horizons for developing innovative, efficient and cost effective distribution channels. For international businesses, the traditional channels of distribution include buying agents, cross country distributors and direct supplies to the customers. This background is imperative for devising a placing strategy for clusters. If cluster is a product, the best place strategy would be the one which could facilitate contacts and transactions between cluster players and their existing and potential customers. The foremost step in this regard is to fabricate a conducive environment, characterized by security, hospitality for foreigners, boarding and lodging facilities and hassle free visa processes, for foreigner clients (Bastos & Nasir, 2004). This ease and warmth in welcoming potential customers at home is deemed imperative to bolster initial contacts between cluster players and customers. To translate this contact into a business relationship, easy access of cluster through rail, road, sea and air network is essential. Trade corridors, motorways, railways and sea ports, thus, turn out to be ingredients of placing strategy for cluster marketing. Finally, ICT readiness of cluster players serves as a catalyst to reinforce this relation.

Promotion

To propagate the ability of a product to provide solutions to customers, firms endeavor to communicate with their customers. This communication comes in the Promotion component of marketing mix, and is probably the most applicable and widely practiced component for traditional marketing activities. On this similar pattern, cluster marketing seems to embrace this component in a far better way as compared to the other three constituents of 4P's. Participation in international fairs and exhibitions, inward and outward trade delegations etc. are examples of this. Other promotional measures for cluster could be taken by developing a public-private partnership for sponsoring mega events like tournaments of famous games as well as promoting the image of clusters as a combination of business and tourist places.

ANALOGIES BETWEEN PROPOSED CLUSTER MARKETING FRAMEWORK AND CONTEMPORARY LITERATURE

Cross Marketing

It is a fact that prevailing redundant and orthodox approaches of cluster marketing would lead industrial clusters towards entering a danger zone of slowing down the process of change adaptation – a key ingredient of economic success (Akehurst, Comeche, & Galindo, 2009) in today's' fast paced business atmosphere and a globally competitive environment (Barkley & Henry, 2001). There is an ominous need to assess cluster marketing thoughts in the perspective of emerging dimensions of place marketing.

One of the most appealing concepts that are associated with place marketing is "cross marketing" which is described as a combination of activities that help firms to broaden their customer base whilst reaching out to other firm's customers (Rainisto, 2003). In the context of place marketing this phenomenon is described as incessantly marketing between and among place players that could benefit all parties collectively. For example, visitors of a specific place are not merely the day-trippers but are also prospective customers/investors for a number of firms and can influence through word of mouth to their employers or other stakeholders for possible business collaborations in their native towns. It also entails the promotion of certain places as a lucrative place for holding international exhibitions, trade fairs or international meetings to gain manifold advantages in the backdrop of these events. The cross marketing methodology has proved enormously exultant in formulating place marketing strategy and the same could be applied with cluster marketing practices due to its broader context of attracting and enhancing customer base.

Diamond Model of Porter

The effectuality of a process or plan is usually reliant on prior analysis of the established state of affairs and anticipated upshots. The same methodology prevails while starting the process of place marketing (Kotler & Gertner, 2002; Rainisto, 2003; Berg, Klink, & Meer, 1993) . In other words, we can articulate that a strategic analysis of a place should lead the process of place marketing (Trueman, Klemm, & Giroud, 2004). According to Ashworth & Voogd (1994) the building blocks of place marketing process can be broadly categorized into producers, market and consumers. In their viewpoint the process elements of

these broader building blocks composed of resources, product, marketing tactics and dealings, customer populations, segmentation and strategies. The success of place marketing process is largely dependent on effective integration of process elements and the nature of relationship among producers, consumers and market. Alternatively, Kotler et al. (Kotler, Asplund, Rein, & Haider, 1999) proposed a support mechanism of place marketing to improve subsist-ability, investment capabilities and visitor's attract-ability of the place, which involves four key components, described as: Place as Character (i.e. sagacity of the place, values and old heritage), as a Fixed Environment (i.e. well-suited basic infrastructure along with natural atmosphere), as a Service Provider (i.e. well established public service mechanism e.g. security, education, health) and as Entertainment & Leisure (i.e. clubs, restaurants, sports complex, parks etc). The successful accomplishment of Kotler et al. a proposed framework of place marketing calls for a great deal of interest and passion by major actors/players of place. According to Kotler et al. (1999) the major actors in place marketing process can be grouped into domestic, local, national and international players.

The critical analysis of place marketing process would lead us to presume that it is basically a culmination of combined interests of various individual groups either public or private residing in a place. This phenomenon of combined interests of different individual groups is closely associated with cluster development approaches and methodologies particularly Porters framework of diamond model. According to diamond model, (Porter, 1990) performances of individual firms depend upon positive transformation of factor input conditions, demand conditions, network of related and support industries and perspectives of firm strategy and configuration of competitive rivalry among firms operating in a cluster/location. Furthermore, as these constructive circumstances are particularly convened in industrial clusters, so both public and private stakeholders as a part of a cluster should collaborate to strengthen existing clusters. In this regard Governments should align their industrial policies in favor of supporting existing clusters and focus on configuration of new ones.

Table-2 depicts the comparative analysis of the above discussed thematic areas of place marketing process and diamond model. It reveals that the inception of place marketing concepts and frameworks are deeply rooted in cluster development approaches evolved by Michael Porter.

Table 2: Diamond Model and Place Marketing

Diamond Model by Porter (1990)	*Place Marketing Support Mechanism by Kotler et el. (1999)*	*Place Marketing Process by Ashworth & Vgood (1994)*
Factor Input Conditions Provision of high quality and specialized input resources i.e. Human, capital, Physical Infrastructure Information and Science & Technology Infrastructure, Natural Resources	Place as fixed Environment A compatible basic infrastructure with the natural environment plays a vital role in success of firms operation in a place Place as Service Provider well established public service mechanism e.g. security, education, health	
Demand Conditions • Existence of sophisticated and demanding • Local customers • Demand in special segments that can be served locally and globally • Customer need anticipation		Consumers • Populations: Needs, Wants • Demands Segmentation • Customer Choice Strategies
Related and Supporting Industries • Access to locally competitive supplier firms • Presence of Clusters		Producers • Product Strategies • Resources
Context for Firm Strategy and Rivalry • Local rules and regulations to encourage investment and sustained development • Competition among local rivals	Place as Character Sagacity of the place, values and old heritage. It reveals how decision making mingle with issues is affecting development	Market Marketing Tactics and Dealings • Image Creation • Functional Design Structures • Organizational Policies

Public-Private Partnership

The "Public Private Partnership" (PPP) model adds another interesting dimension to the place marketing strategies (Rainisto, 2003) that necessitates the involvement and participation of both local/state governments and private businesses as interconnected nodes(Andersson, Serger, Sörvik, et al., 2004) for a place to rise above and endure in the place battle (Kotler & Gertner, 2002). It has been noted (Berg et al., 1993) that due to the scarcity of adequate resources and capabilities, government or private sector alone cannot take-up the responsibility of place development. Mutual cooperation among diverse stakeholders confers the place with vital accumulation of resource capabilities (Scott, 2001). In addition to this PPP assists metropolitan cities to differentiate their identity by means of employing entrepreneurial wisdom of private sector in

market planning and state administrator as stimulators to build a tempting business atmosphere (Berg et al., 1993). Alternatively, concerns related to Environmental Pollution, Technology Transfer Facilities, Industrial Estates & Innovation Parks, Common Testing, Quality Checking & Training Facilities, etc. are addressed more resourcefully. Likewise, according to Ward (1998) scientific research institutions and educational institutions (especially universities and vocational/technical training colleges) are also ancillary components of the PPP pyramid and adds further attraction to a place especially in the context of knowledge based, research oriented and learning organizations. The successful execution and adaptation of PPP model in the context of place marketing is principally dependent on the in-side-in and in-side-out relationships of industrial agglomerations operating in a geographical location. The cluster development/marketing policies and framework envisaged in above sections undoubtedly illustrates that the foundations of PPP model is stoutly entrenched in cluster process (Andersson, Serger, & Sörvik, 2004).

CONCLUSION

As an idea, cluster development emerged out of economics literature and then spread into the realms of public policy. Both the economists and policy makers seem to concur that clusters play a significant role in development of local economy and bolster innovation, and that a broad ranging and comprehensive plan is essential for embarking on cluster development initiatives. Since these cluster development measures are seen through an economic and policy prism, there has been a skewed focus on marketing of the clusters. A similar trend is observed in marketing literature as there is acute paucity of applicable cluster marketing frameworks. Since an important building block of clusters is geographical concentration of firm, a parallel marketing theory of place marketing furnishes a lead of considering clusters as a place which could be marketed through basic marketing tools, such as marketing mix. Drawing on this conception, this article has attempted to propose a cluster marketing framework which could further be improved through future empirical and conceptual testing.

The proposed framework provides an opportunity to Small and Medium Enterprises Development Authority (SMEDA) to devise projects for cluster marketing. SMEDA is apex federal government agency for SME development in Pakistan and is mandated to coordinate SME specific initiatives of other federal

agencies, provincial departments and international business development agencies working in Pakistan. These roles provide SMEDA the mandate to coordinate with various stakeholders in selected clusters and develop a cohesive plan for marketing of the cluster. The proposed framework specifically refers to bring diverse stakeholders together and devise integrated plan, encompassing infrastructure development, tourism development and cluster development as interdependent components of cluster marketing strategy. The key contribution of the present paper in this regard is to put forward a fresh perspective which emphasizes on focusing on 'geographical' facet of clusters as basis for their marketing, instead of undertaking fragmented measures for promotion of products and/or services of industrial clusters in Pakistan. Another important aspect which this paper has highlighted is that product quality alone is not enough to attract international customers; rather a package of tourism attraction, local hospitality, easy access and appropriate pricing is required for marketing of Pakistani clusters.

REFERENCES

Ahmed, P. K., & Rafiq, M. (1995). The role of internal marketing in the implementation of marketing strategies. *Journal of Marketing Practice: Applied Marketing Science, 1*(4), 32-51.

Akehurst, G., Comeche, J. M., & Galindo, M. A. (2009). Job satisfaction and commitment in the entrepreneurial SME. Small Business Economics, 32(3), 277-289.

Andersson, T., Serger, S. S., Sörvik, J., Hansson, E. W., Schwaag-serger, S., & Kostadinov, I. B. (2004). The cluster policies whitebook (Vol. 49): Citeseer.

Ashworth, G. J., & Voogd, H. (1990). Selling the city: marketing approaches in public sector urban planning: Belhaven Press.

Ashworth, G. J., & Voogd, H. (1994). Marketing and place promotion. Place promotion: The use of publicity and marketing to sell towns and regions, 39-52.

Barkley, D. L., & Henry, M. S. (2001). Advantages and disadvantages of targeting industry clusters. REDRL Research Report, 09-2001.

Bastos, F., & Nasir, J. (2004). Productivity and the investment climate: what matters most? Available at SSRN 610379.

Bennett, R. (1997). Export marketing and the Internet: Experiences of Web site use and perceptions of export barriers among UK businesses. International Marketing Review, 14(5), 324-344.

Blois, K. J. (1999). Relationships in business-to-business marketing–how is their value assessed? Marketing Intelligence & Planning, 17(2), 91-102.

Boote, A. S. (1984). Interactions in psychographics segmentation: Implications for advertising. Journal of Advertising, 43-48.

Cavusgil, S. T., Chan, K., & Zhang, C. (2003). Strategic orientations in export pricing: a clustering approach to create firm taxonomies. Journal of International Marketing, 47-72.

Constantinides, E. (2006). The marketing mix revisited: Towards the 21st century marketing. Journal of Marketing Management, 22(3-4), 407-438.

Czinkota, M. R. (1994). A national export assistance policy for new and growing businesses. Journal of International Marketing, 91-101.

den Hertog, P., & Remoe, S. (2001). Innovative clusters: drivers of national innovation systems: Publications de l'OCDE.

Dibb, S. (1998). Market segmentation: strategies for success. Marketing Intelligence & Planning, 16(7), 394-406.

Enright, M. J. (1993). The geographic scope of competitive advantage: Division of Research, Harvard Business School.

Gertner, D., & Kotler, P. (2004). How can a place correct a negative image? Place branding, 1(1), 50-57.

Gold, J. R., & Ward, S. V. (1994). Place promotion: the use of publicity and marketing to sell towns and regions: John Wiley & Sons Ltd.

Hankinson, G. (2004). Relational network brands: Towards a conceptual model of place

brands. Journal of vacation marketing, 10(2), 109-121.
Hankinson, G. (2005). Destination brand images: a business tourism perspective. Journal of Services Marketing, 19(1), 24-32.
Hassan, S. S., & Katsanis, L. P. (1994). Global market segmentation strategies and trends: New York: International Business Press.
Hassan, S. S., & Kaynak, E. (1994). Globalization of consumer markets: structures and strategies. Recherche, 67, 02.
Helsen, K., Jedidi, K., & DeSarbo, W. S. (1993). A new approach to country segmentation utilizing multinational diffusion patterns. The Journal of Marketing, 60-71.
Hofstede, F. T., Steenkamp, J. B. E. M., & Wedel, M. (1999). International market segmentation based on consumer-product relations. Journal of Marketing Research, 1-17.
Kamakura, W. A., & Russell, G. J. (1993). Measuring brand value with scanner data. International Journal of Research in Marketing, 10(1), 9-22.
Kearns, G., & Philo, C. (1993). Selling places: the city as cultural capital, past and present: Pergamon Press.
Keller, K. L., Parameswaran, M., & Jacob, I. (2011). Strategic brand management: Pearson Education India.
Kotler, P. (2007). Marketing management: Pearson Italia Spa.
Kotler, P., Asplund, C., Rein, I., & Haider, D. H. (1999). Marketing places Europe: how to attract investments, industries, residents and visitors to cities, communities, regions and nations in Europe: Financial Times Prentice Hall.
Kotler, P., & Gertner, D. (2002). Country as brand, product, and beyond: A place marketing and brand management perspective. The Journal of Brand Management, 9(4), 249-261.
Kotler, P., Hamlin, M. A., Rein, I., & Haider, D. H. (2002). Marketing Asian places: attracting investment, industry, and tourism to cities, states, and nations: John Wiley & Sons.
Kotler, P., & Keller, K. L. (2003). A framework for marketing management.
MacGregor, R. C., & Hodgkinson, A. (2007). Small business clustering technologies: applications in marketing, management, IT and economics: IGI Global.
Marshall, A. (1961). Principles of economics: an introductory volume. Ninth (Variorum) Edition (1890): London: Macmillan.
Marshall, A., & Marshall, M. P. (1920). The economics of industry: Macmillan and co.
McBurnie, T., & Clutterbuck, D. (1988). The marketing edge: vital lessons in marketing success: Penguin Books.
McCarthy, E. J. (1964). Basic Marketing, Richard D. Irwin, Homewood, IL.
Moilanen, T., & Rainisto, S. (2009). How to brand nations, cities and destinations: a planning book for place branding: Palgrave Macmillan.
Morosini, P. (2004). Industrial clusters, knowledge integration and performance. World Development, 32(2), 305-326.

Moskowitz, H. R., & Rabino, S. (1994). Sensory Segmentation. Journal of Global Marketing, 8(1), 73-94.
Myers, S. C., & Turnbull, S. M. (2012). Capital budgeting and the capital asset pricing model: Good news and bad news. The Journal of Finance, 32(2), 321-333.
Nauwelaers, C., & Wintjes, R. (2003). 8. Towards a new paradigm for innovation policy? 9. Regional innovation policy for small-medium enterprises, 193.
Nordhaus, W. D. (1969). Invention. Growth and Welfare: A Theoretical Treatment of Technological Change Cambridge, Mass.: MIT Press.
Olson, M. (1965). The logic of collective action: Public goods and the theory of groups (Vol. 124): Harvard Univ Pr.
Philip, K. (1994). Marketing Management: Analysis Planning Implementation and Control: Prentice-Hall of India.
Porter, M. E. (1990). The competitive advantage of nations: with a new introduction: Free Pr.
Porter, M. E. (1996). Competitive advantage, agglomeration economies, and regional policy. International regional science review, 19(1-2), 85-90.
Porter, M. E. (1998). Competitive strategy: techniques for analyzing industries and competitors: with a new introduction: Free Pr.
Porter, M. E. (2000). Location, competition, and economic development: Local clusters in a global economy. Economic development quarterly, 14(1), 15-34.
Pred, A. (1966). The spatial dynamics of US urban-industrial growth 1800-1914.
Rainisto, S. K. (2003). Success factors of place marketing: A study of place marketing practices in Northern Europe and the United States: Helsinki University of Technology.
Scott, A. J. (2001). Global city-regions: trends, theory, policy: Oxford University Press, USA.
Shenker, S., Clark, D., Estrin, D., & Herzog, S. (1996). Pricing in computer networks: Reshaping the research agenda. Telecommunications Policy, 20(3), 183-201.
Simmie, J., & Sennett, J. (1999). Innovative clusters: global or local linkages? National Institute Economic Review, 170(1), 87-98.
Smith, A. (1937). The Wealth of Nations (1776). New York: Modern Library, 740.
Sölvell, Ö., Lindqvist, G., & Ketels, C. (2003). The cluster initiative greenbook: Ivory Tower Stockholm.
Steinle, C., & Schiele, H. (2002). When do industries cluster?:: A proposal on how to assess an industry's propensity to concentrate at a single region or nation. Research policy, 31(6), 849-858.
Stöttinger, B. (2001). Strategic export pricing: a long and winding road. Journal of International Marketing, 40-63.
Trueman, M., Klemm, M., & Giroud, A. (2004). Can a city communicate? Bradford as a corporate brand. Corporate Communications: An International Journal, 9(4), 317-330.
Tu, H. (2011). Cluster Marketing Models and Strategies: The Implications Thereof in the

Chinese High-Tech Industry. International Journal of China Marketing, 1(2), 34-44.
Tzokas, N., Hart, S., Argouslidis, P., & Saren, M. (2000). Industrial export pricing practices in the United Kingdom. Industrial Marketing Management, 29(3), 191-204.
UK, D. (2003). A Practical Guide to Cluster Development: London: Ecotee Research & Consulting for DTI and the Eng lish RDAs, http://www. dti. gov. ukJclusters/ecotec-report/download. html.
Van den Berg, L., Klaassen, L. H., & Van der Meer, J. (1990). Marketing metropolitan regions: Erasmus University. European Institute for Comaarative Urban Research.
Van den Berg, L., Van Klink, H. A., & van der Meer, J. (1993). Governing metropolitan regions: Ashgate Publishing.
Ward, S. V. (1998). Selling places: the marketing and promotion of towns and cities, 1850-2000 (Vol. 23): Routledge.
Webster Jr, F. E. (1992). The changing role of marketing in the corporation. The Journal of Marketing, 1-17.
Witt, S. F., & Witt, C. A. (1995). Forecasting tourism demand: A review of empirical research. International Journal of Forecasting, 11(3), 447-475.
Zyglidopoulos, S., DeMartino, R., & Reid, D. (2006). Top of mind: cluster reputation as a facilitator in the internationalization of small and medium-sized enterprises. Corporate Reputation Review, 9(1), 79-87

–

Regional Office
Khyber Pakhtunkhwa.
Ground Floor,
State Life Building,
The Mall, Peshawar.
Tel: (091) 111-111-456
Fax: (091) 5286908

Regional Office
Punjab.
8th Floor, LDA Plaza
Egerton Road, Lahore.
Tel: (042) 111-111-456
Fax: (042) 36370474

Regional Office
Balochistan.
Bungalow No. 15-A,
Chaman Housing Scheme,
Airport Road, Quetta.
Tel: (081) 2831623
Fax: (081) 2831922

Regional Office
Sindh.
5th Floor, Bahria Complex II,
M.T. Khan Road, Karachi.
Tel: (021) 111-111-456
Fax: (021) 35610572

Turn Potential into Profits!

Small and Medium Enterprises Development Authority
6th Floor, LDA Plaza, Egerton Road, Lahore-54000
UAN: (042) 111-111-456
Fax: (042) - 36304926-7