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**TECHNOLOGICAL INNOVATIONS USED TO
OVERCOME THE PROBLEM OF RESOURCE
SCARCITY IN SMALL SCALE ENTERPRISES:
IMPLICATIONS FOR POLICY**

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Abstract

This study sought to identify the innovations developed by SEs in their effort to overcome problems related to resource scarcity with a view to establishing the technological obstacles hindering further development. 129 SEs were sampled in four areas - Nairobi, Thika, Nyeri and Machakos. The data needed was gathered through observation and interviews.

Most of the technological innovations identified meet the criteria of appropriate technology as described in the literature. The techniques used make optimum use of available materials and resources in the local environment and the products created meet the local people's needs. The processes are more labour-intensive, relatively simple and show a high degree of adaptation to the local environment.

A major problem of most innovations in the SE sector is that although the innovators expect imitation, they appear incapable of preempting it by strengthening their designs as suggested in the literature. Another problem with the innovations in this sector is the lack of continual change or improvement which is necessary for the maintenance or enhancement of competitiveness even after the imitative phase. The major obstacles hindering the continual improvement of these innovations are lack of finance, marketing skills and technical expertise.

The major policy interventions proposed in this study relate to the provision of an enabling environment to facilitate the coming together of the SE innovators and the important aspects of finance, technical expertise and market information. The problem of financial resources should be addressed through policies designed to improve access to credit in this sector, while encouraging SE owners to form associations and to devise their own credit programs. The government should play a facilitative role through the use of policy instruments that encourage continuous and incremental upgrading of existing technologies in the SE sector. Research should be devoted to upgrading SE sector technologies with a view to addressing the limitations relating to production processes, skills and quality of output.

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I Introduction

(a) Background of the Study

A large body of recent research has focused on the problems faced by small and new enterprises in Africa. The problem of lack of access to resources has been thoroughly documented. Two major constraints associated with minimal resources are the high failure rates of new enterprises and lack of growth among surviving ones.

Extant literature suggests that the most severe problems inhibiting the survival and growth of small enterprises are experienced in the start-up phase of a business and are related to resource scarcity and lack of credibility. Mortality rates of enterprises have been found to decline monotonically with age. That is, in any given situation, new enterprises are more likely to fail than older ones (Stinchcombe, 1965; Freeman, 1990). In Kenya, it is estimated that more than 70% of all small enterprises created in any one year fail in the first year alone.

However, experience shows that even in extremely difficult environments, a few SEs manage to survive and sustain reasonable growth. The literature available suggests that the owners of these enterprises utilize highly innovative and non-conventional strategies in setting up and managing their enterprises. Furthermore, their perception and use of resources appears to differ markedly from that of owners of enterprises that are started with resource advantages (Starr and Macmillan, 1991; Newmark, 1990).

Although it is evident that information on the development and use of such technological innovations which overcome the key problem of resource scarcity would contribute significantly to small enterprise development, promotion of enterprise culture and promotion of appropriate technologies, no effort has been made to systematically investigate and record such technological innovations. It is also important to determine the obstacles hindering further improvement of these innovations.

It is notable that the government policy toward the SE sector aims at encouraging:

'the application of technologies that minimize waste and exhibit recycling possibilities; ... the use of local talents

and inputs wherever possible; ... and the active development of innovations and inventions' (GOK, 1989).

However, there appears to be no clear strategy on how to pursue this objectives. Some of the technologies developed in the SE sector out of economic necessity meet these objectives. By documenting such innovations and identifying obstacles hindering further development, the study aims to draw attention to them and to provide information needed to facilitate the development of appropriate strategies to promote innovation in the sector.

(b) Research Method

This study sought to identify the innovations developed by SEs in their effort to overcome problems related to resource scarcity with a view to establishing the technological obstacles hindering further development. 129 SEs were sampled in four areas - Nairobi, Thika, Nyeri and Machakos. The data needed was gathered through observation and personal interviews.

II Basic Concepts

(a) Small Scale Enterprises

Many definitions have been used for SEs depending on the purpose of classifying firms into the categories of large, medium and small. Definitions used in different countries differ depending on the size of the economy. A Private Sector Diagnoses Study (USAID, 1989) found that most enterprises in Kenya have less than twenty employees. The study focuses on enterprises utilizing technologies whose main advantage or basis of development is to overcome resource scarcity. The enterprises which meet this criteria are likely to be small as their choice of such technologies is likely to have been influenced by their lack of resources.

(b) Resource Scarcity

Resources are always viewed as scarce relative to requirements. The scarcity of resources in business creation influences the choice of technology to be used in a firm. Small innovative enterprises are known

suffer more from the problem of minimal resources than large established enterprises. Their ability to obtain external resources is complicated by lack of collateral and the high risk associated with newness and innovation. Since entrepreneurs are motivated by opportunities rather than resources owned, they tend to perceive the problem of resources as one of access and control rather than ownership (Timmons, 1990; Stevenson and Gumpert; 1985). The behaviour of entrepreneurs starting ventures with minimal resources is characterized by a lack of resource intensity.

(c) Technological Innovation

Cooper (1994) defines technological innovation as the acquisition, use or development of firm specific technological skills which lead to technical improvements. It covers the efforts of differentiation at the firm level aimed at obtaining competitive advantage in the market by developing new products and processes. In this study, technological innovation is viewed as including new processes (new ways of using existing resources to produce existing products); new products (the use of existing processes and materials to produce completely new or changed versions of existing products) and the use of new sources or types of materials (Stoneman (1987). The focus of this study is on the development of ideas into marketable products which are adopted by the relevant target market.

(d) Technology Policy

Technology policy generally refers to policies involving government intervention in the economy with a view to influencing the process of technological innovation (Stoneman, 1987). A wide range of technology policy tools can be used by the government to influence technology policy, including education, financial, political, scientific, public enterprise, procurement and legal and regulatory instruments such as patents (Rothwell, 1983). This heterogeneity reflects both the wide variety of instruments available and the various attitudes on how technical change can be stimulated (Stoneman, 1987).

(e) Technological Change and Innovation

Competitive behaviour and imitation are considered as key drivers of innovativeness. The search for new technologies which are temporarily available to the innovative firm alone and confer advantages of monopolistic rents is a key influencer of innovation (Cooper, 1994). Further, the imitative process which follows creates the need for continuous innovation in order to remain competitive. This has led some authors to conclude that there is no such thing as sustainable advantage based on technological innovation. It is this competition of entrepreneurs based on the search for better technologies which forms the basis of economic development (Freeman, 1982).

Another important characteristic of innovation is that the knowledge incorporated in the new technologies can in varying degrees be appropriated by the innovating enterprise. The imitative phase is viewed as crucial to any explanation of innovative behaviour. Cooper (1994) notes that the behaviour of innovative firms is influenced greatly by expectations of imitation, and innovators may seek to pre-empt imitation by strengthening their appropriation of new technology.

In the SE sector technological innovation is build around methods of production, where over time the firm builds its technological knowledge to the point where it becomes a source of new technologies. Freeman (1982) distinguishes between five types of strategies toward innovation: offensive, defensive, imitative, dependant and traditional strategies. Offensive and defensive strategies are concerned with the early introduction of technologies while imitative tend to follow innovative firms. Dependant strategies are mainly used by small subcontracting firms whose technology is determined by the customer. Traditional strategy is basically non innovative as firms do not change in technically significant ways. This is closely linked to market structure and is related to competitive strategies of market leaders, challengers, followers and nichers. Many small enterprises are generally associated with imitative and followership strategies mainly because of their lack of resources.

The process of technological change involves three stages generally classified as Schumpeter's trigoly. These are invention which refers to the generation of new ideas, innovation which covers the development of new ideas into marketable products and diffusion which is the adoption of these products by the relevant actors in the economy (Stoneman, 1987). Technologies change over time and the process of invention and innovation may proceed continuously even as diffusion is

going on. Basically the major outcome of technological advance is considered to be improvement in economic welfare. Hence, the impact of the new technology can only be realized if the technology is diffused.

(f) Indigenous Innovation and Appropriateness

Innovation is the act that endows resources with a new capacity to create wealth. According to Drucker (1985), there is no such thing as a 'resource' until man finds a use for something in nature and thus endows it with economic value. Innovation empowers individuals and enables them to generate wealth and improve their circumstances. It is creativity and innovativeness which enables resource poor entrepreneurs to use ingenious techniques to transform resources otherwise thought of as unproductive into usable assets.

This study focuses on technological innovations developed and used in the small enterprise sector to overcome resource scarcity. This implies a strong consideration for the market. Such indigenous innovations are expected to be well suited to address the entrepreneur's as well as the market needs and are viewed as more 'appropriate' for the circumstances. Indeed, they seem to have most of the characteristics associated with appropriate technology.

According to Stewart (1987:3) the characteristics defining AT normally include more labour-using, less capital using, less skill-using; making more use of local materials and resources; smaller scale; producing a more appropriate product (that is simpler product designed for lower income consumers or a product suitable as an input into other appropriate technologies).

In this study, the technological innovations investigated are considered highly appropriate. They are evaluated on the basis of making use of low cost local materials and resources including what is considered waste by others and producing a more appropriate and marketable product at a low price to consumers. In terms of capital usage, their bases of creation is to overcome lack of capital in the conventional sense.

Another aspect in the SE sector is that they do not always work with fixed designs as the general tendency is to produce things to match people's needs. (Juma et al, 1993). The products in this sector reflect an effort to adapt to local conditions and needs. Most innovations from this sector appear to aim at modifying existing product designs to ensure easy maintenance and repair.

III Principal Findings

(a) Profile of Respondents

The small enterprises (SEs) covered in this study include service and manufacturing firms. Most had less than four employees and were started by the founders working alone, but grew to have three or more employees. Majority of the business owners (86%) were below 40 years of age. 50% of the total respondents had primary school level of education while 38% had secondary level education.

With regard to their previous employment before starting their enterprises, 44% of the respondents had operative positions while 17% were in supervisory positions. This appears to have given them useful experience which was of value in their small enterprises. The nature and size of these businesses reflects clearly on previous employment. 51% of the respondents worked for small enterprises with between 0-5 employees. This fact gave them encouragement and determination to start up similar size businesses. Further, 57% had experience in private firms or family businesses. 40% were in a business that was in direct competition with the previous employer. With regard to training 57% of the business owners had technical skills in the respective fields gained through training or experience from their previous employment. However, very few respondents had any training or experience in marketing, book keeping or management. 41% had no training or experience at all and learnt what they knew through simple observation and imitation.

Regarding the source of start-up capital, most entrepreneurs (78%) started their businesses with personal savings. 29% got some funds from friends and family members while very few (11%) got credit from Co-operative Societies, Banks and Financial Institutions.

(b) Product/Service Characteristics

The study objects were selected on basis of product characteristics with emphasis placed on technological innovations used to overcome resource scarcity. These products/services were expected to create value by reducing cost for the entrepreneur, the buyer or both.

Most of the innovations covered in the study seem to reduce costs for both the entrepreneur and the buyer. Some of the products and service

innovations identified in the study as using such resource reducing techniques are presented in descriptive form in appendix 1.

The overall impression is that a number of SEs are making efforts to address problems of resource scarcity through innovation. The innovations identified in this study show that the entrepreneurs have a keen focus on adding value by reducing costs and this is a major contributor to their performance. It is notable that most of the technological innovations identified meet the criteria of appropriate technology described in the literature. Some of the technologies covered in the study include the production of TV aerials, wick lantern using tins, jute mattresses, energy saving 'jiko', sawdust 'jiko', tyre sandals, fancy toys, metal boxes, farm implements, bulb protectors, improvised car bumper, improvised sink for hair salon without tap water, and a host of repair services among others. The materials used for making the products are mostly locally obtained and in some cases are waste products from other industries.

Most SEs covered in this study have adopted an imitative strategy with introduction of slight improvements. There appears to be a high rate of imitation and most of the users of the technological innovations identified did not develop the technologies they use, and are not aware of the originator of the methods. Most of the innovations are easy to copy through observation and the problem they solve for customers exists in various geographical areas. It is therefore easy to copy an idea and set up a business in a different location. Moreover, many of the SE owners interviewed are not able to increase production quickly because of the slow speed of the production techniques they use.

The technological innovations developed and used in the small enterprise sector to overcome resource scarcity appear to be well suited to address the entrepreneur's problem as well as the market need for low cost products and appear to be more 'appropriate' for the circumstances. The technological innovations investigated are considered highly appropriate. They are evaluated on the basis of making use of low cost local materials and resources including what is considered waste by others and producing a more appropriate and marketable product at a low price to consumers. In terms of capital usage, the essence of their creation is to overcome lack of capital in the conventional sense.

Indeed, they seem to have most of the characteristics associated with appropriate technology. The techniques used make optimum use of available resources in the local environment and the products created improve people's welfare. Further, the technologies meet the

characteristics used to define AT such as, more labour-using, less capital using, less skill-using; making more use of local materials and resources; smaller scale; producing a more appropriate product - that is simpler product designed for lower income consumers or a product suitable as an input into other appropriate technologies. In addition, these technologies use existing local skills, introduce new skills that can be easily acquired in a short period of time, use machines that can be serviced locally, and the capacity of such technology can be fully utilized.

Another feature of the firms investigated is that they do not always work with fixed designs as they mostly tend to produce things to match people's needs. This means that customers are a major source of innovative ideas as their needs and problems call for innovation. The products in this sector reflect a keen effort to adapt to local conditions and customer needs. The adaptability leads to the development of new skills and product improvements. For instance, the repair of worn out cooking pans and plastic basins may not feature as a need in developed countries. Some innovations from this sector appear to aim at modifying existing product designs to ensure easy maintenance and repair (eg. rewinding of transformers).

Lack of resources has made repair and improvisation in the use of waste materials and available tools an important characteristic of innovation in the SE sector. The products from this sector meet the needs of the lower end of the market which is increasingly seeking repair rather than replacement.

(b) Factors Influencing Innovation in the SE Sector

Generally, the entrepreneurs using the innovations identified appear to fit into three categories:

- (i) Those who use the innovations for the purpose of overcoming their own resource scarcity problems.
- (ii) The more opportunistic entrepreneurs who took to innovation in order to address a perceived gap in the low end of the market which could not be satisfied adequately, using existing processes and products.
- (iii) 'Copy Cats' or imitators who took advantage of an easy to copy process to produce an easily marketable product.

However, it is notable that most SE owners interviewed (97%) claim to have gone into business first and foremost to create a job for

themselves (a push factor). The pull factors which inspired them to start this kind of business were to meet perceived need for the product or service, to offer a cheaper alternative, cater for low income earners, use freely available inputs, take advantage of an opportunity and to test a new idea. This is consistent with the literature on entrepreneurship which acknowledges the importance of both the push and pull factors in business start-up.

Some respondents claimed that they were inspired by the saying that, "necessity is the mother of invention" and went out to utilize freely and readily available inputs (such as wastes of other businesses) to make needed, usable and 'easy to make' items. Thus, the aspects of recycling of wastes and use of freely available inputs did not serve to inspire them to start ventures as such, but offered an opportunity to create a viable business and overcome the problem of resource scarcity.

Concerning where the entrepreneurs learnt how to make the products they do, most said they learnt from social contacts such as friends and family, training, previous employment and observation. Most respondents did not originate the product idea but learnt through training or observation. In most cases (83%), the respondent did not even know who initiated the idea.

Regarding the benefits that accrue to innovators in the SE sector, some of the entrepreneurs pointed out that they enjoy high returns due to lack of competition. They also act as consultants and trainers for which they sometimes charge a fee. Others felt that they stand out distinctively in the society and command respect from the community as they make a breakthrough in a unique field. They also feel a sense of personal satisfaction and gain 'recognition' and status for their achievement.

(c) Factors Hindering Improvement of Processes Used

Although there are many benefits of innovation in the SE sector, there are also many deterring factors. The most common problems noted are lack of financial resources for improvement of techniques / methods used. Other factors hindering the growth of these enterprises are lack of marketing skills, skilled labour and expertise to improve on the technologies. Further, some respondents were concerned about the wastage of materials and risk of injury during trials conducted to test a new technique. Another drawback is that some processes of making the products are strenuous or risky. Overall, the development of new or

modified products and the use of new production processes was considered costly, risky and time consuming.

Regarding perceived satisfaction with the production process methods, about half the business owners (51%) were dissatisfied with the production methods used. They felt that there was room for improvement to better, more cost reducing and time saving methods, as well as higher quality output.

However, the majority (95%) felt that customers were satisfied with the products and services offered using existing techniques. This is gauged from the many loyal customers, repeat buyers and the lack of complaints by buyers. An important aspect hindering further improvement is price limitation, as customers may not be willing to take a price increase. The respondents perceived the major advantages of the products they offered as affordability, durability and repairability / ease of repairing.

Most respondents expressed interest in improving their ventures through product/service quality improvement, improvement of the production process (e.g. use of machines instead of manual processes, increase in speed of production), and introduction of new designs. The main factors hindering such improvements include lack of capital, limited market information, price limitations, inadequate technical know-how and lack of recognition or protection from imitators. Most respondents felt that provision of financial support, marketing skills, technical support and infrastructure would encourage greater creativity in the SE sector.

IV Conclusions, Policy Implications and Recommendations

Most of the technological innovations identified are based on imitation with minor improvements or modifications. They meet the criteria of appropriate technology described in the literature.* The techniques used make optimum use of available materials and resources in the local environment and the products created meet the local people's needs. The processes are more labour-intensive, relatively simple, and produce low priced products which are simpler and easy to maintain or repair. These technologies show a high degree of adaptation to the local environment.

A major problem of most innovations in the SE sector is that although the innovators expect imitation (imitative behaviour is considered an important influencer of innovation), they appear incapable of

preempting it by strengthening their designs as suggested in the literature. In addition, the simplicity of the innovations coming from the sector makes them easily copiable and denies entrepreneurs long-term advantages which are expected to accrue to innovators..

Further, most of the SE innovations are based on imitative or dependent strategies which forces them to remain market nichers or followers serving the lower end of the market or small segments. Another problem with the innovations in this sector is the lack of continual change or improvement which is necessary for the maintenance or enhancement of competitiveness even after the imitative phase.

The major obstacles hindering the continual improvement of these innovations are lack of finance, marketing skills and technical expertise. The innovators also lack protection from risk of loss or injury during trials. Further, their inability to assess market needs and market size in a broader area hinders further development. In suggesting the policy interventions needed to enhance innovation in the SE sector, this study focuses on the problems and obstacles identified as hindering continual change or improvement of the processes currently used.

With regard to the problem of financial resources as a major issue hindering further improvement of technologies in the sector, efforts should be made to seek ways of bringing together capital and technology with a view to turning the innovative efforts of individual entrepreneurs into viable ventures. Policies can be designed to improve access to credit in this sector by encouraging SEs to form associations and to devise their own credit programs which meet their requirements. Further, an annual inventors contest can be organized and government credit allocated to award winners.

Concerning the problem of technical expertise, the policy focus should be on encouraging the spread of technical education at various levels as this provides an important starting point in technological innovation. Further, there is need to encourage the establishment of links between technical training institutions and the local industrial sector as a way to promote sharing of ideas and skills which might facilitate continual change or upgrading of technologies used.

Government research bodies should be encouraged to focus on research and development devoted to upgrading SE sector technologies with a view to addressing the limitations relating to production processes, skills and quality of output. Further, the government should encourage the restructuring of existing institutions to enable them address the needs of the

SE sector. Policies should be geared at strengthening the capability of research institutions to translate research findings into industrial application and to focus their efforts on technologies suitable for the SE sector.

Further, it is important to sensitize policy makers about the issues hindering further improvement of technologies used in the SE sector. Effort should be focused on adopting a participatory approach in the policy formulation process in order to ensure that the views of relevant actors both in the SE sector, support agencies and government are considered.

In addition, the government should play a facilitative role by creating an enabling environment to encourage the SE sector to design programs to address the problems facing them. The provision of physical infrastructure such as, industrial sheds, electricity, access roads and storage facilities would address some of the basic needs of SEs and facilitate growth. Formation of SE associations should be encouraged to facilitate participation and easy access to support programs. Emphasis should be placed on addressing the limitations relating to production processes, skills and quality of output.

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Appendix 1

Summary of Unique Products and Services

Product / Service Characteristics	Name and Description of the Product or Service	How it Works
Reducing cost for entrepreneur	<u>Sandals.</u> The sandals are made of old vehicle tyres which are cut and designed to size and shape. The cost of the tyres (raw materials) is cheap compared to the number of pairs made from each. The tyre sandals are also cheaply priced compared to the factory slippers.	The sandals are used as shoes and slippers alike. They are normally associated with the nomads who walk through tough terrain. They are hard soled and long lasting. They are also suitable in hotels as bathroom slippers.
Reducing cost for buyers/cateters for low income customers.	<u>Television Aerial.</u> The aerial is made from aluminium metal bars which are joined with some pieces of sheet metal.	The aerials are connected to television sets to enhance the reception of clear air waves.
	<u>Stove Wicks.</u> They are made of waste textile products. The wicks are made from interwoven threads to make strong wick. Though they are regarded as of low quality they are popular with the low income earners who use tin lamps.	The wicks are used with tin lamps for lighting.
	<u>Jute mattresses.</u> These mattresses are made from waste textile materials.	The mattresses are low priced and are used for sleeping on.

<p><u>Button Making</u>. Pieces of cloth are punched onto a round shaped piece of sheet metal using a manually operated machine.</p>	<p>The buttons are used by dressmakers on various types of clothing.</p>
<p><u>Plate making machine</u>. The machine makes plates used in image exposure in the printing industry.</p>	<p>The machine, an exposure unit, exposes on image from a negative to a plate which is used for printing.</p>
<p><u>Jembes and Fork Jembes (hoes)</u>. These are made by burning of metal/iron in fire until is red hot. They are then hammered with a mallet to make the desired shape. The materials are cheaply available.</p>	<p>The hoes are used for tilling the land in small-scale farming.</p>
<p><u>Tin Lamps</u>. The lamps are made of waste bins. Wicks made from textile materials used for lighting. Soldering is done to put the handle and the head cock onto the lamp.</p>	<p>The lamps are low priced. They are used for lighting in houses just like lanterns.</p>
<p><u>Patching of Cooking Pans (<i>Sufurias</i>)</u>. A pan whose bottom part is worn is renewed by putting a new bottom cover. A sheet metal from another worn out pan is shaped and cut to size and affixed onto the worn out pan giving it a new bottom part and making it usable for cooking again.</p>	<p>When the worn out pan has been out mended. It serves normally in cooking and heating. Its life span is longer than that of a new pan, which is likely to be made of a lighter material.</p>
<p><u>Chaff cutters</u>. It is a manually operated machine for cutting nappier grass as cattle feed.</p>	<p>The machine is fixed with knife wedges fixed onto it, i.e., is rotated manually as it cuts the grass into pieces.</p>

	<u>Lantern Glass Protector</u> . The wires are interwoven around the clear glass surface to form a pattern and prevent breakage.	The wiring system protects the glass from sudden and easy breakage. It also gives a longer life.
	<u>Transformer Winding</u> . Blown up transformers are rewound using new wires to rejuvenate them and put them back to use.	A transformer regulates the input and output of electric power. It is a power converter from high to low voltage and vice versa.
	<u>Saw-dust Jiko</u> . Sheets of metal of various sizes are soldered together to make the <i>jiko</i> . Saw dust is then used as fuel in place of charcoal which is perceived as or non-available in some areas.	The <i>jiko</i> is used as a cooker.
	<u>Mirror balls</u> . These are ball which are coated with pieces of transparent mirrors. They are hanged onto the roofs of disco halls to produce colourful reflections and illusions in the dance halls.	The mirror balls hung onto the roofs. They rotate in opposite directions to create a spectrum of mixed colours that beautify the hall. They are cheaper than imported one.
	<u>Salon Service using Home-made Sinks</u> . Hair is washed using buckets of water and other containers instead of sink water.	The hair is washed with water as a person bends over the sink. The water collects and goes down the sink into the drainage system.
	<u>Battery Clips</u> . These are clips which are used to connect the transmission of power from a battery source.	The clips act as connectors as they connect wires supplying power to an electric apparatus from a battery. The conduct power at the terminals.

	<u>Paint Tinting</u> . This involves the addition of other colours to a white colour to get the desired secondary colours. This process saves buyers from buying all the colours of paint they require.	After the desired colour is made it can be used for painting as required.
Uses waste products/overcomes resource scarcity	<u>Water sprinklers</u> . It is made by welding up together pieces of water pipes onto a sheet of metal. It is then painted.	The small pipes face different directions and when connected to a tap produces water in jets. It is usually used for irrigation.
	<u>Basin Patching/Repair</u> . Commonly known as 'chomelea'. It involves patching up of slightly worn out basins using pieces of sheet metal which are heated to red hot. Pieces of worn out plastics are patched firmly onto the cracked basin.	After patching up the cracked or torn basins they are then put back to use, e.g., washing clothes.
Uses non-conventional methods	<u>Spring</u> . Springs of wire are coiled like spirals and used as springs.	The springs are used in joining objects to one another. The elastic/spring kind of movements helps release and join objects as required.
	<u>Bicycle Toys</u> . The product is made of wires which are shaped and coiled to resemble a real bicycle and to move like one when pushed.	The bicycle toys are used by kids as toys. These are cheap and fancy as they are manually made. They are made into various designs.