



## THE NEW ERA OF ECOPRENEURS: CASE STUDY OF MITTI COOL



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### ABSTRACT

**T**he concept of Ecopreneurship gained recognition after 1970's. Innovations are growth drivers of the economy and along with economic benefits, it is essential that innovations deliver green benefits. Ultimately, resource availability is significant for industry and at the same time protecting environment helps the economy in the long run. An ecopreneur is a person whose business efforts are not only driven by profit, but also by a concern for the environment. In this paper, case of Mitti Cool is analysed from ecopreneurial perspective. Mansukhbhai Prajapati, a Gujarat based ecopreneur has taken risk and came out with clay products such as Earthen plate, Clay water filter, Mitti Cool Refrigerator, Nonstick Clay Tava, Clay Cooker and other clay items useful for domestic use . His success mantra is innovate continuously and executive ideas with effective networking and marketing strategies. Former president APJ Abdul Kalam called Prajapati a 'true scientist'. He is the holder of the Indian patents for these products that boast high efficiency and an eco-friendly nature.

**KEYWORDS:** Ecopreneurship, Green Innovation, Ecopreneur, Characteristics of ecopreneur, Business growth and expansion.

### 1.INTRODUCTION

In the early 1970s, Harvard Business Review ran a pioneering article arguing that the 'ecology movement' could provide profitable new markets for business expansion rather than simply being a drain on economic activity (Quinn 1971). By the late 1980s, this theme had begun to become more prominent. Elkington and Burke (1989), for example, argued that innovative business solutions could be used not only to improve the environment but also to provide the basis for new business prospects overlooked by mainstream firms.<sup>1</sup>

Innovations are growth drivers of the economy and along with economic benefits, it is essential that innovations deliver green benefits. Ultimately, resource availability is significant for industry and at the same time protecting environment helps the economy in the long run.

Ecopreneurship exploits new business opportunities and helps the economy in moving towards greener earth. By launching green innovations, ecopreneurs create a business environment leading towards exploiting natural resources and protecting the earth along with registering profit.

### 2. WHO IS AN ECOPRENEUR?

The terms such as "Sustainopreneur", "Environmental Entrepreneur" and "Eco Capitalist" are synonymous with ecopreneur. "An entrepreneur whose business efforts are not only driven by profit, but also by a concern for the environment". (Schuyler, 1998)<sup>2</sup>. Joseph Schumpeter (1934) referred to such entrepreneurial activities as 'creative destruction'. Ecopreneurs destroy existing conventional production methods, products, market structures and consumption patterns and replace



them with superior environmental products and services. They create the market dynamics of environmental progress. Entrepreneurial thinking starts first with individuals, as environmental preferences are personal concerns. This is why ecopreneurs such as Claus Hipp (founder of the Hipp company, one of Europe's largest producers of baby food), Gottlieb Duttweiler (founder of Migros, the largest food-supplier in Switzerland) or Ernst Pfenninger (head of Trisa, a leading European producer of brushes and brooms) embody the combination of strong environmental and social values with an energetic entrepreneurial attitude. Ecopreneurs show personal mastery (Senge 1996) and consider their professional life as a creative act. Differences between personal goals and the perceived reality are taken as a challenge and not as a problem (Senge 1996: 175)<sup>3</sup>

The characteristics of ecopreneurs are:

- They come out with green business ideas.
- They deliver social value along with economic value.
- They start a business venture which involves an element of risk.
- The degree of positive environmental impact separates ecopreneurs from entrepreneurs.

### **3. PILLARS OF ECOPRENEURSHIP**

1. Limited Natural Resources: Ecopreneurs are conscious about usage of natural resources as they are limited and same must be used carefully not only to fulfill the needs of the current population, but also for the future generations. Hence, new product development should revolve around ways to conserve energy, materials, and resources to meet the needs of the growing population in order to make sustainability possible.
2. Desire for healthy life drives ecopreneurs: Ecopreneurs value life of various stakeholders of the earth be it animals or human beings. The pollutants released in the air due to use of fossil fuels is adversely affecting the climate. In order to sustain the climate, ecopreneurs are involved in finding alternate ways to produce energy such as using wind, water and solar energy. They develop products and ways to increase life expectancy such as healthier food, purified water, green two wheelers, etc.

Ecopreneurs can utilize green issues as a competitive advantage for their enterprises on the basis of the four principles known as Natural Step principles.

The guidelines in these principles are (Harper, gavin.2009):

1. Energy and Resource Use Efficiency and Maximization: "In nature, one-way linear flows do not long survive. Nor, by extension, can they long survive in the human economy that is a part of the earth's ecosystem. The challenge is to redesign the materials economy so that it is compatible with the ecosystem". (Lester Brown. Earth Policy Institute). By minimizing waste production and maximizing reuse of waste streams, sustainable business can potentially significantly increase profits.
2. Ecosystem Services: Services related to protection of ecosystem and natural resources and preventing environmental degradation can be an inspiration for a green business idea for ecopreneurs.
3. Natural step principles: Ecopreneurs can see potential risks, such as extinction of substances extracted from the Earth's crust or overharvesting etc, as opportunities for success through green business.
4. Eco- efficiency and eco- effectiveness: Ecopreneurs should find methods of decreasing waste while increasing productivity such that the waste of the production process and the product itself can be the raw materials of a new product of service.

Sustainability development over the next several decades offers vast new business opportunities with value up to \$6.2 trillion. Companies who are proactive in their approach and want to survive in the long run can utilize these opportunities to generate large profits and at the same time build rapport for being environment friendly. According to a study, by 2050, there would be vast opportunities for businesses as the global challenges of growth, urbanization; scarcity and environmental change would become the strategic drivers for businesses (Connor, Michael 2010)<sup>4</sup>

Moreover, in today's time, the awareness and the effort to protect the environment have increased to a great extent. People expect from the companies that they should not only be there to make profits, but must also serve the society and the environment because, after all, the society and the environment are the driving forces of any company. The term "Corporate Social Responsibility" or commonly known as CSR is used to denote to a business's responsibility towards the society and environment. Many companies are now engaged in CSR activities. But, the biggest hindrance in the company's efforts to protect the

environment and for long term good of the company is the stakeholders who expect only economic success from the companies which is usually measured in short spans of time. Capital is extremely mobile, so stockholders are more interested in policies that quickly generate profits by raise in share prices rather than in policies which would work for the long term success of the company (Cobb, John B.1998)<sup>5</sup>

Organisations such as Coca Cola and P&G have moved in the market with a vision of sustaining growth over the years and have exhibited practices which conserve natural resources and protect the environment. Recycling plants, energy production by using waste materials, using byproducts for packaging and making new products etc. have grown a lot in the recent years and there are immense business opportunities in the green industry.

#### 4.BACKGROUND OF THE ECOPRENEUR

The pace with which pollution increases, if with the same pace innovative green products are introduced then this earth would have become heaven. One of the finest efforts is undertaken by the proud owner of the brand "Mitti Cool" Mr.Mansukhbhai Prajapati, resident of small village called Nichimandal of Morbi, Rajkot. Though a school drop out after 9<sup>th</sup> standard, he has registered six innovations under his belt i.e. earthen plate, Clay water filter, Mitti Cool Refrigerator, Nonstick Clay Tava, Clay Cooker and other clay items useful for domestic use. He is dealing in manufacturing and selling of clay products and at the same time he is also a guest instructor in "Gujarat Matikam Kalakari" board.

He is hailed as one of rural India's most successful entrepreneurs and was even featured in Forbes' Top 7 Rural Entrepreneurs list in August 2010. Several national awards are given to him for his work and his company Mitti Cool Clay Creations has won recognition across the globe.<sup>6</sup>

Mansukhbhai had exposure to the making of clay products since childhood, as this was his family's traditional profession. He used to help his father in his work and got firsthand experience of clay creation at a tender age. After the tragic breakdown of Machhu dam of Morbi in 1979, his family lost everything and they had to migrate to Wankaner, where his father took the job of a mason to support the family. In the year 1985, Mansukhbhai started his career at Jagdamba Potteries, a rooftop tile manufacturing unit as a trainee at Rs. 300 per month. The entrepreneurial spirit egged him to try something of his own after the initial few years during which he refined his skills on the potter's wheel.<sup>7</sup>

#### 5. RISK TAKING AND NEW VENTURE CREATION

In the year 1988, he left his job and took a loan of Rs. 30,000 to start his own earthen plate manufacturing factory. Mansukhbhai skillfully modified the roof tile making hand press and developed a hand press machine having a capacity to produce 700 earthen pans per day. He sold one pan for 0.65 paisa and within 2 days he could sell the entire 1st batch. This continued for some time. However, after getting negative feedback from customers regarding the durability of the *tavas* (pans) he experimentally varied the proportions of clay to get a mix which was more heat resistant and durable.<sup>8</sup>

In 1990, he registered his unit as Mansukhbhai Raghavbhai Prajapati. However, the turning point came in 1995, when a Rajkot based businessman, Chiragbhai Patel, came looking for a vendor who could supply clay water filters. He impressed him with an innovative terracotta filter with a ceramic candle and bagged a 500 piece order worth Rs 1 lakh.

#### 6.ABILITY TO INNOVATE AND WORK IN ADVERSE CONDITIONS

His business faced a setback in 2001, when an earthquake destroyed most of his stock. A month later, Sandesh, a Gujarati daily, featured Prajapati's broken clay water filter with the caption, 'the poor man's broken fridge'. This caption sparked off another idea to develop a clay fridge that would run without electricity. However, he could convert this idea into a product only in 2002. Mansukhbhai took a loan from some acquaintances and his father's home as collateral for a bank loan. In consultation with Gujarat Grassroots Innovation Augmentation Network (GIAN) of Ahmedabad, he spent three years on testing of soils and design options for fridge. He finally came out with the Mitticool fridge in 2005. Priced at Rs. 4000-4500, it has sold more than 9000 units all across India. This clay fridge *works on the principle of evaporation. Water from the upper chambers drips down the side, and gets evaporated taking away heat from the inside, leaving the chambers cool.*

*This clay fridge is designed in such a way that it takes care of all essential storage along with water. The top upper chamber is used to store water. A small lid made from clay is provided on top. A small faucet tap is also provided at the front lower end of chamber to tap out the water for drinking use. In the lower chamber, two shelves are provided to store the food material. The first shelf can be used for storing vegetables, fruits etc. and the second shelf can be used for storing milk etc. This clay refrigerator is an affordable option to keep food, vegetables and essential goods naturally fresh for days.<sup>9</sup>*

## 7. USE OF EFFECTIVE NETWORKING AND MARKETING STRATEGY

In 2006, he found an angel investor professor Anil Gupta from IIM Ahmedabad and vice-chairman of National Innovation Foundation, who gave Rs 2 lakhs, which helped repay debts. A year later, he registered his firm as Mitti Cool Clay Creations, having already filed the trademark application in the name of Mitti Cool in 2001. With the help of innovative ideas this firm has created pressure cooker (Rs 300-500) and a non-stick pan (Rs 135-200). Mansukhbhai has become an instrument behind reviving the art of making clay utensils. Today, at least 500 potters in Gujarat are in the business of making clay products.

He did not stop here. He continuously came out with innovative product ideas. He introduced cookware made from clay. It is actually an earthen pot with side handles, a clamp to ensure the lid is well-shut and even a cooker whistle to let off the steam. Mansukhbhai claims that this clay cooker is made from special clay, and cooks food in a far healthier manner than its stainless steel counterpart. Costing Rs 400 per piece, Mansukhbhai says he has sold about 3000 units so far. Marketing of this product takes place using his website, through dealers in some of the Indian cities and word of mouth publicity.<sup>10</sup>

His enterprise, employing 15-20 potters, managed to break even in 2010. The products are not only supplied all over India, but he has also received orders from 41 countries. In 2011-12, he posted a turnover of Rs 25 lakh and the company is growing at 15% annually. He is now eyeing a revenue target of Rs.35 lakhs in the next fiscal.<sup>11</sup>

Today, these clay products are so successful that he now has a row of factories with an assembly line production of myriad clay products. Big machines designed by Prajapati himself, mold the clay in seconds into pots and pans each of them produced in their hundreds to keep up with the rising demand. He has a turnover of Rs 45 lakhs and a running staff of over 35 people.<sup>12</sup>

Clay products, are sold all over India today and sell especially well in Chennai. His products have also gone to Africa and this year, Prajapati has dispatched his first consignment of 100 clay fridges to Dubai.<sup>13</sup>

Next on his cards is a Mitti Cool home, where the lighting and cooling will be completely natural and without electricity. It is a house made of clay to keep it cool in summers and warm in winters. Today in India we are exposed to excessive heat almost for eight months, this Mitti Cool Home is a welcome option for all of us.

No wonder former president APJ Abdul Kalam called Prajapati a 'true scientist'. He is the holder of the Indian patents for these products that boast high efficiency and an eco-friendly nature.

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