

# **Consumer's Perception towards Organic Food Products**

**Hamsaveni, K**

**(12PIR009)**

**Thesis submitted to**

**Avinashilingam Institute for Home Science and Higher Education for Women,**

**Coimbatore – 641043**

**In Partial Fulfilment of the Requirement for the**

**Degree of Master of Science in Interior Design and Resource Management**

**March, 2014**

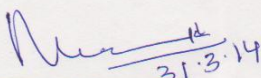
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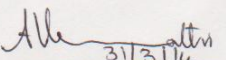
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Signature of the Supervisor

  
Signature of the Head of the  
Department

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## **ACKNOWLEDGEMENT**

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## INTRODUCTION

***“Everything is the product of the Universal creative effort.  
There is nothing dead in nature. Everything is organic and living, and  
therefore the whole world appears to be a living organism”***

**-LuciusAnnaeus Seneca**

The concept of food quality has changed dramatically in the recent years. It now refers not only to the characteristics of the final product, but also to the way in which it is produced, processed and transported. Organic foods is the one of the fastest growing markets in spite of its high cost, due to increased concern among consumers about their health, and the reported crises and emergencies worldwide on food safety is and also because of certain environmental issues in recent decades. This is also because of day-by-day ever increasing use of various chemical fertilizers and inorganic disease control measures in agriculture. These chemical fertilisers and inorganic disease control measure not only adversely affect the natural resources and soil fertility but also the health of human beings (Solar et al.2008). Sixty percent of herbicides, 90 percent of fungicides, and 30 percent of insecticides are potentially carcinogenic, according to the Environment Protection Agency (EPA).

Consumers in developed and developing countries have now become more health conscious and they have started spending in natural food materials. Also, this gravity of depleting soil health and environmental hazards has drawn the attention of scientists and policy makers to find out a way for sustainable and eco-friendly farm system in the various agro-climatic conditions worldwide, keeping in the view, the needs of the present and future generations (Aryal, 2009).

## ***Eat Organic!***

Diet plays an important role in health and disease. The food we choose to eat can help in the prevention of many illnesses, thus increasing our quality of life. In the local supermarket or health food store, there are more organic food choices than ever before.

The reason might be attributed to the little or no pesticide residue left on produce, environmentally friendly and higher levels of nutrients.

Organic foods can include fruits, vegetables, grains, dairy foods, eggs and to some extent, meat and poultry. Organic food are defined as those foods that are grown without the use of synthetic fertilizers, sewage sludge, irradiation, genetic engineering, pesticides, or drug. Organic foods, such as fruits, vegetables and milk, are more nutritious than then non-organic counterpart (Paddock, 2009). They have high concentration of antioxidants, vitamin C and minerals like Zinc, Iron, calcium, magnesium, chromium and other healthy chemicals (Ungoed- Thomas,2009). Also, the benefits the environmental such as biodiversity, high soil quality and low energy output cannot be over looked. Biodiversity is important to an ecosystem. Such an system with the coexistence of diverse species tends to yield better quality crops. Organic farming also improves the quality of soil. Soil Organic Matter (SOM), such as organic and nitrogen compound, are essential for soil to produce high- quality crops. Organic farming leads to lower emission of carbon dioxide which is an added advantage (Shepherd et al, 2009).

Environmental protection agency (EPA) completes a risk assessment for each pesticide and determines if there is “reasonable certainty that the pesticide will not harm a person’s health”. If there is risk, the pesticide will not allowed to be used. The National Organic program ensures that the production, processing and certification of organic foods match a comprehensive standard. Organic produce had a 30 percent lower risk of pesticide contamination than conventional fruit and vegetables. Large farming or processing operation must be certified. Even smaller, uncertified organic operations must abide by certain labelling standards (Misner and Florian, 2013).

Organic food has become more popular than ever. Perhaps, the markets are growing at a rate much faster than the organic food production does. Producers, manufactures and processors of organic foods have to be registered with the National Organic Program (NOP). They are required to conform to the rules and standard prescribed by the NOP and any violation will result in suspension of the license and withdrawal of the products from the market consumers should be made aware on such issues. There are over 400 chemical that are being regularly used in conventional farming to kill weeds, insects and other pests that feed on crop. Some crops are being sprayed up to 16 times with 36 different pesticides. These were generally reported for a wide range of health problems in adults and children. All these pesticides are banned in organic food.

Farmers and growers of organic products who preserve Mother Nature's land had to be respected with dignity.

Organic farming is not of recent origin in India. In ancient literature such as Rig-Veda, the use of animal dung as manure was emphasized while Atharvaveda indicated the importance of green manures and was practiced even before 1000 BC. Kautilya's arthashastra also recorded manures like oil cakes, excreta of animals etc,. Non-organic foods have residues of chemical fertilizers, genetically modified genes, chemical toxicity and/or growth hormones. Instead, organic food is all-natural.

Organic foods are becoming popular because of the changing attitudes of consumers to change the eating habits and also because of the ill effect of inorganic foods and its related health problem. Long- term exposure to pesticides even increases the risks of more serious chronic diseases such as respiratory problem, memory deficits and miscarriages and even cancer (McCauley et al,2009 and Misner and Florian, 2013). People eat organic foods for philosophical purpose as well.

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***Say No to Synthetic Pesticides and Fertilizers***

There is an ongoing debate as to whether it's healthier to choose organic foods versus non-organic foods. Many people on the organic side claim that organic fruits, vegetables and other foods contain more nutrients, while touting the dangers of chemicals, pesticides and additives found in conventional foods. Those on the inorganic side claim those organic foods are costly, using the label as a marketing ploy to charge heftier prices for foods that have little to no difference in safety and nutritional value (Cenzon, 2012).

Organic food has plenty of advantages when compared to the non-organic food that have been processed with artificial preservatives and chemicals. Organic foods are proved to solve digestion issues, skin trouble and promote fitness. They are literally free of harmful chemicals and additives having been prepared with minimal or almost no synthetic food processing materials. It is every one's right to have food that is as fresh and natural as nature would give to us. There are also certain limitations like lack of option, lack of likable taste etc., However, with now more and more natural food stores in place, finding organic options for whichever food item is definitely not difficult. Organic products are now sold in speciality store and conventional supermarkets. Organic foods like fruits, vegetables, drinks and shakes, RTE breakfasts, gluten free meals, spices and seasonings, sweeteners, etc., are available in the market. These natural, organic foods are not only healthy but are all eco-friendly since they do not indulge in peppering them soil with harmful chemical additives (Annadurai, 2010).

Consumers spend more on organically produced products and so famers in developed countries are encouraged to convert their existing farm into organic farms and are often fully supported with financial incentives and technical assistance (Panda, 2010).

Organic farming has become an alternative for an increasing number of consumers who are worried about the chemical residues in food stuffs and the degrading environment caused by chemical intensive production methods. To explore the potential markets for consumers, it is important to know how consumers related issues of food quality and food system are existing since it identifies not only the beliefs and attitudes towards organic food but also the impact of those attitudes on food choice.

It also helps to model consumers' food choice behaviour with respect to organic food.

Different people have different perception towards organic products. The perception towards these products is also associated with the culture, lifestyle and the market environment at which these products are marketed. Green people are those who are concerned with the environment, food phobic; who are concerned about chemical residues in food, humanists; people who are preoccupied with factory farming methods and hedonists; people who believe that a premium products must be better and importantly taste better. The perception towards organic product is determined by how people think about this product, what words they associate this product with, and what is their expectation from them. The word 'organic' invokes a variety of images, attitudes and beliefs for consumer (briz and Ward, 2009). The most common words associated with organic products are: 'food without chemicals', food that is 'not intensively' produced and the crops that are grown in 'natural' environment (Cenzon, 2012).

Reported that in the United States, 'chemical-free' is the most associated word for organic products, followed by 'natural' or 'home grown', 'healthier' and 'earth friendly'. However, in some cases, the organic product is also perceived differently. Some consumers have classified organic product as a niche and has high values (Jonas and Roosen 2005). They are perceived as branded products and imply a high quality image and because of this image, they are sold at the specialty shop, command price premium and purchased by small segment of consumers who are categorized as the middle and upper income group. (Kontogeorgos and Semos 2008).

Concerns related to the environment are evident in the increasingly environmentally conscious market place. Over the years majority of the consumers have realized that their purchasing behaviour has a direct impact on many ecological problems (Gracia, 2008).

The growth of organic agriculture is seen as part of the emerging marketing trends where consumers demand to know what benefits a food could deliver before making a purchasing decision. Although the demand for organic food is still buoyant, there are signs that markets are maturing (Magistris, 2008).

Organic farming has been identified as a major thrust area in the 10<sup>th</sup> plan of the central government of India and a sum of rupees. One billion rupees have been allocated in. In 2012-13, total food-grain production is over 250 million tonnes. Minimum support price for every agricultural produce has increased significantly under the Indian Government. Currently India has only 1,426 certified organic farms. There may be more farmers who are growing organic produce, but due to lack of data, statistical discrepancy, weak link in the organic, economic chain and certification, the data are still wanting. The US market for organic foods has grown from \$3.5 billion in 1996 to \$28.6 billion in 2010, according to the Organic Trade Association. (Forman and Silverstein , 2014).

The position of India is 75<sup>th</sup> in the global map of organic farming and 37.2 million hectare of agricultural land is organic 2011. (Willer and Lernoud, 2011)The export oriented certified organic cultivation area in the country has grown to 2.5 million hectare. This is the right time for India to make relentless efforts to take substantial cultivation of organic products and food produce. (Jahagirdar, 2007).

The main issue of marketing organic products is related to its supply chain. Organic products are bound with the standard procedures including the production, packaging, labelling, transporting, storage, distribution channel and pricing. It requires special attention and good management practices. The production of organic products is monitored by the country's certifying body that is usually affiliated with 98 international certifying authorities. This is related to good agricultural practices in which the farm's procedural practice is fully implemented and monitored by the authority.

The enforcement of good agricultural practices facilitates the marketing of organic products in the international arena. The marketing of organic products is also influenced by the element of trust among consumers, producers and sellers. The consumers are confident that the products really complied with the standard and are produced according to the standards. They are also confident that the producers and the sellers are bound with the production and business ethic and all information related to the organic products is revealed in the product label. The distribution channels play important roles in the marketing of organic products. It implies how organic products are distributed and reach the consumers.

In general, the price of organic products is higher than the conventional one. Price is one of the biggest obstacles in marketing organic products which is the barrier between the consumers and the sellers (Kontogeorgos and Semos 2008). The higher price often results from the higher cost of production, especially labour cost and the loss of income or the opportunity cost when farmers convert their conventional farms to organic farms (Aryal et al, 2009). However, consumers are always comparing the price they have paid and the value of the products. Consumers are willing to pay for the products if they believe that the value is higher than the price; and vice versa. Gender is also used to distinguish whether men or women have different views on organic food preferences. Women's preferences in food purchasing are particularly interesting since they do most of the household food shopping. Age, education, income and gender influence purchase of organic foods. (Benjamin et al. 2007). Since consumer's confidence in the safety of food is decreasing (sivakumar, 2008), It is high time and equally important studies and to sellers opinion about organic foods.

The growth in demand for organic food is expected to continue in the coming years, even though the situation differs from one country to another in term of type and quantities of production (Gracia 2008). The future of organic will, to a large extent, depend on consumer demand. Thus, a consumer-oriented approach to understand organic agriculture is important not only in its own right, but also in terms of a response to shifting market dynamics (Haghiri ,2009). Nevertheless, to increase the consumption

of organic food, many efforts needed to communicate the benefits of organic food and farming to get potential consumers.

The goal of food safety monitoring also helps consumers to get wholesome food. The scientific evidence is crucial in determining the consumer's attitude towards purchasing organic food. It is vital to bridge the gap between attitudes and actual behaviour .Thus, with various trends related to organic product flashing here and there, and to find out more about consumers and sellers knowledge, practice and perception towards organic food, this study on “**Consumer's Perception towards Organic Food Products**” has been undertaken with the following objectives: to

- 1 assess the knowledge and practice of sellers towards organic foods
- 2 find out the level of awareness about organic food among consumers
- 3 assess consumers' perception towards organic and inorganic food and
- 4 determine the changing trend towards consumption of organic food

## REVIEW OF LITERATURE

The present study titled “**Consumers Perception towards Organic Food Products**” is reviewed under the following headings:-

- F. Food as the basic requirement of man
- G. Food safety aspects in an organic perspective
- H. Need and importance of organic foods
- I. Consumers’ perspective towards organic food product and
- J. Existing research on organic food products and consumers interest

### **A. Food as the basic requirement of man**

Availability of basic needs is one of the major approaches to the measurement of absolute poverty in developing countries. It attempts to define the absolute minimum resources necessary for long-term physical well-being, usually in terms of consumption goods. It is believed that humans are motivated to fulfill basic needs, before they can fulfill more complex education needs such as the need to know and understand (Pairs, 2009). A traditional list of immediate “basic needs is food (including water), shelter and clothing.

Man must eat in order to live; therefore, one of the most important problems man has is that always being certain that he will have enough to eat when he need it. At first, man did not have any way to control his food supply. Roots, seeds, berries, eggs, fruits, honey, and the meat of animals were used. If there was no rain, or if the weather was too hot or too cold, plants would not grow and man had little or no food (Kontogeorgos , 2009). The article 47 of the Indian constitution of 1950 also articules the right to food and its relationship to health. It is imperative to create and enforce legal entitlement and obligation to ensure that every person is assured physical, economical and social access to adequate food with dignity as necessary to lead an active and health life (Draft Right to Food Act, 2009).

Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin and contains essential nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals. The substance is

ingested by an organism and assimilated by the organism's cells in an effort to produce energy, maintain life, or stimulate growth and in turn, the body is functional. The right to food is a human right recognizing the "right to an adequate standard of living, including adequate food, "as well as the "fundamental right to be free from hunger." (Benjamin et al., 2008)

Food safety and security are monitored by agencies like International Association for Food Protection, World Resource Institute, World Food Programme, Food and Agriculture Organization, and International Food Information Council. These agencies address issues such as sustainability, biological, diversity, climate change, nutritional economics, population growth, water supply, and access to food. (Magistris, 2009).

It is a biologically known fact, that right since the first living organism breathed for the first time billions of years ago, it needed food. Food is something without which growth, development and evolution would have been impossible. Every living thing on the face of the earth, irrespective of plants and animals, need nutrition to survive, grow and reproduce. All the living things on earth are therefore, dependent on each other for survival in some way or the other (Aparna Jadhav, 2010). The food chain in nature includes both plants and animals that are a part of it and even the tiniest ecosystem has a food chain for itself. Food is not only important for our survival but when humans are concerned, there are many other important points also. Without food, there is no survival. The food pyramid stresses its value in our live. Charles Darwin (2009) also supported the importance of food through the theory of "survival of the fittest".

Consumption of food and liquid is vital to sustain life and to meet our body's needs for growth, development, and function. Every cell in the body depends on a continuous supply of calories and nutrients, whether obtained through food, Intravenous nutrients, or tube feedings. Eating and food, however, also have symbolic meanings associated with love, sensuality, comfort, stress reduction, security, reward, and power.

There is a strong relationship between memory and food; for example, the taste, smell, and texture of food can trigger memories of earlier food-

related events and activities in our lives. The ability to eat and the enjoyment of eating are important aspects of good quality of life. In other word, “being able to eat what I want, want” makes us feel good (Lawson, 2011).

The food we eat gives our bodies the “information” and material they need to function properly. If we don’t get the right information, our metabolic processes suffer and our health declines (Carolyn. D, 2008), ([www.lifeline.com](http://www.lifeline.com)).

“Nutrients are the nourishing substances in food that are essential for the growth, development and maintenance of body functions. When nutrient intake does not regularly meet the nutrient needs dictated by the cell activity, the metabolic processes slow down or even stop” (wardlow, 2011).

## **B. Food safety aspects in an organic perspective**

It is quite common in conventional farming to use chemical in the treatment of crops, different illegal hormones and legal antibiotics in animal husbandry. The residues of these chemicals - pesticides, herbicides or fungicides remain in the final produce and can accumulate in the human body causing adverse health effects. Even though there are checks and regulation, many farmers are rarely aware of these and also about the harmful effect of chemical pesticide, fertilizes and insecticides (Andersson, 2007).

Consumption of organically grown food is a great way to reduce your exposure to contaminants commonly found in foods that have been grown using conventional agricultural practices. These contaminants may include not only pesticides - many of which have been classified as potential cancer-causing agents - but also heavy metals such as lead and mercury, and solvents like benzene and toluene. Minimizing exposure to these potential toxins is an important benefit for your health. Heavy metals can damage nerve function, contributing to diseases such as multiple sclerosis, and interfere with hemoglobin production in a way that increases risk of anemia. Solvents can damage white blood cell function and lower the immune system's ability to resist infections. (Shepherd.A, 2008)

Antibiotics used as growth promoters also pose a great risk to humanity. Over exposure to antibiotics leads to strains of highly resistant bacteria, its consequences are rather threatening. There is also a need to know why food safety is important, as we cannot consume spoiled /perished food and food with chemical residues as the fuel for our bodies. Food safety is at the forefront of consumers' food concerns. (walter, 2009).

Government services helps to ensure that food quality and safety requirements are met by all. It is everybody's responsibility to apply correct food handling practices in order to avoid threat to food quality and safety.

Besides safety, there quality attributes which includes: nutritional value; organoleptic properties such as appearance, colour, texture, taste; and functional properties. Consumers, food industry and government regulators are also concerned with these quality criteria. However, the major problem that arises is that introduction of chemical to reach these quality attributes. Quality can be considered as a complex characteristic of food that determines its value or acceptability to a consumer, and it is important to realise that consumers evaluation of quality is often subjective. From a regulatory or consumer protection point of view, "quality" refers to the basic objective requirements which must be met under existing laws and regulations to assure that foods are safe, not contaminated, adulterated or fraudulently presented. Safety requirements for foods are neither optional nor negotiable. Furthermore, recent international agreements emphasize the need for food safety measures to be based on risk analysis following principles and procedures elaborated by relevant international organizations. **International food safety standards and food hygiene requirements are equally valid for conventionally and organically produced food** (Andersson and Bergh, 2007). However, mandatory and optional quality standards do exist in order to ensure that essential product requirements are met and to protect consumers against fraudulent practices.

There are many types of safety hazards associated with foods that can arise during the production of foods or their subsequent handling, processing and packaging. Microbiological hazards include bacteria,

protozoa, parasites, viruses, and fungi or their toxins. Naturally-occurring toxicants in the environment such as zinc, arsenic and cyanide or in the food itself such as solanin and histamine, may also contribute food safety hazards. Toxic industrial chemicals or radioactive wastes are other potential sources of food contamination. Contaminants may enter the food chain due to excess or improper fertiliser use; examples are cadmium, nitrates and nitrites. Misuse of authorised pesticides or veterinary drugs may also create chemical hazards in food. Contaminated animal feed or improper animal feeding practices could also lead to unsafe food. (Catherine, 2009)

Although on a global basis, the rating of health risks due to food additives and pesticide residues are relatively minor (both acute and chronic effects) as compared with microbiological and other naturally occurring toxins, its health implications are serious and even life threatening. Pesticide residues are generally present on both organic and non-organic produce, and, on average, appear to be present in lower concentrations in organic products. (Zak Solomon, 2013)

Microbiological contaminants (e.g., bacteria such as *E. coli*) are generally present on both organic and non-organic products in varying degrees. The presence of microbiological contaminants may not vary much (if at all) between the two product types; however, there is a lower incidence of antimicrobial-resistant strains on organic products. Toxic metal contamination of organic produce has been found to be similar to that of non-organic produce. Food additives are also limited in organic products and are therefore generally present in lower quantities than in non-organic products (<http://www.foodsafetynews.com>).

Other contaminants such as nitrates (found in synthetic fertilizers) appear to be lower, on average, in organic products, though they are still present. Some scientists have cited various instances in which organic foods have higher levels of secondary metabolites (e.g., polyphenolic compounds, antioxidants) as a positive feature. Organic foods are popular among the commercial and scientific sectors, as well as among consumers (Zak Solomon, 2013).

The following rules that apply to non-organic food, applies to organic products as well,

- Wash and scrub your produce thoroughly prior to consumption;
- Keep perishables refrigerated;
- Keep meats separate from produce during preparation;
- Do not use foods that appear moldy or that have passed their expiration dates;
- Cook meats and eggs thoroughly prior to consumption;
- Wash your hands prior to, and after, handling food products.

To qualify as organic, crops must be produced on farms that have not used most synthetic pesticides, herbicides, and fertilizer for 3 years before harvest and have a sufficient buffer zone to decrease contamination from adjacent lands. Genetic engineering, ionizing radiation, and sewage sludge is prohibited. Soil fertility and nutrient content is managed primarily with cultivation such as crop rotations, cover crops and waste fertilizers. Pests, weeds and diseases are managed primarily by physical, mechanical, and biological control instead of with synthetic pesticides and herbicides (Forman and Silverstein, 2014). In the United States, organic production is a system that is managed in accordance with the Organic Foods Production Act (OFPA) of 1990. In organic products standards are set by India, National Program for Organic Production.

The National Organic product (NOP) places no restrictions on the use of truthful labelling claims, such as “no drugs or growth hormones used”, “free range”, or “sustainable harvested” (USDA, 2011). The USDA regulates the term “free range” for poultry products; to use this term, producers must demonstrate that the poultry has been allowed “access to the outside”. According to consumers Union’s evaluation, this means that a poultry product comes from a bird that had at least 5 minutes of access to the outdoors each day. But, lots of petroleum is used to produce, package, refrigerate and transport organic food. Additionally, the USDA allows many inorganic additives in food labelled “organic.” Chickens and cows whose produce is labelled organic don’t necessarily have pasture or sunshine. The food may be

mostly organic, but it can be nutritionally inferior (<http://www.animalwelfareapproved.org/>).

### Commonly used Food Product marketing Terms

- |                                      |   |   |
|--------------------------------------|---|---|
| <b>100% organic</b>                  | - | Must contain only organically Produced ingredients Processing aids (excluding water and salt).  |
| <b>Organic</b>                       | - | Must consist of at least 95% organically produced ingredients (excluding water and salt). Any remaining product ingredient must consist of non Agricultural substances approved on the National List.                                       |
| <b>Made with organic Ingredients</b> | - | Must contain at least 70% organic ingredients   |
| <b>Natura</b>                        | - | A product containing no artificial ingredient or added colour and that is only minimally processed ( a process that does not fundamentally alter the raw products).<br>The label must explain the use of the term.                          |
| <b>Free range</b>                    | - | Producer must demonstrate to the USDA that the poultry has been allowed access to the outside.  |
| <b>No hormones (pork or poultry)</b> | - | Hormones are not allowed in raising hogs or poultry, therefore, the claim “no hormones added” cannot be used on labels of pork or poultry unless it is followed by a statement that says “federal regulation prohibit the use of hormones.” |
| <b>No hormones (beef)</b>            | - | The term “no hormones administered” may be approved for use on the label of beef producer if sufficient documentation is provided to the USDA by the producer showing no hormones have been used in raising the animals.                    |

**No antibiotics  
(red meat and poultry)**

- The term “no antibiotic added” may be used on label for meat or poultry products if sufficient documentation is provided by the producer to the USDA demonstrating that the animal were raised without antibiotics.

**Certified-**

“Certified” implies that the USDA's Food Safety and Inspection Service and the Agriculture Marketing Service have officially evaluated a meat product.

**Chemical free**

- This term is not allowed to be used on a label.

Source: Pediatrics volume 130, No. 5, November 2012, Pp, e1407.

**C. Need and importance of organic food**

Organic farming is not of recent origin in India. The organic farming movement arose in the 1940s in response to the industrialization of agriculture that became known in the 1960s as the green revolution. The organic food industry has consistently seen sales increase, rising from \$1 billion in 1990 to \$26.7 billion in 2010. According to the Organic Trade Association, 78 percent of Indian families purchase organic foods. (<http://www.ota.com/organic/mt/business.html>). This percentage is steadily increasing as more consumers are becoming aware of the many health benefits conferred by organic foods.

Global sales for organic foods climbed by more than 170 per cent since 2002 reaching more than \$63 billion in 2011. While certified organic farmland remained relatively small at less than 2 per cent of total farmland under production, increasing in OECD and EU countries (which account for the majority of organic production) by 35 percent for the same time period. In 2011, 7.4% of all food products sold in Austrian supermarkets (including discount stores) was organic (Joshua Coates, 2011).

In 1939, Lord Northbourne coined the term organic farming in his book *Look to the land* (1940), out of his conception of “the farm as organism,” to describe a holistic, ecologically balanced approach to farming—in contrast to what he called chemical farming, which relied on “imported fertility” and “cannot be self-sufficient not an organic whole”.

Organic food production is a heavily regulated industry, distinct from private gardening. Currently, the European Union, the United States, Canada, Japan and many other countries require producers to obtain special certification in order to market food as organic within their borders. In the context of these regulations, organic food is food produced in a way that complies with organic standards set by national governments and international organizations ( Paul.J ,2007).

Organic became popular back in the 1970's when people were becoming concerned about farm chemicals causing pollution and harming the environment. Herbicides and pesticides were introduced after WWII as industry sought a market for the neurotoxins that had been developed for chemical warfare. These petroleum-based chemicals kill by destroying the nervous system (Mary Lou Shaw,2010).

Antioxidants are important nutrients found in fresh fruits and vegetables and have been shown to impart multiple health benefits, including the prevention of many cancers. Some studies show that organic foods may have more antioxidants compared to commercial varieties.

Many consumers choose organic produce because they desire to lower their exposure to the pesticides found on commercial produce. Certified organic produce is free from pesticide residues. Wright, (2012) in his study on “human Health Benefits of Eating Organic Foods” concluded that majority of Organ Phosphorus (OP) pesticide exposure in humans comes from dietary intake. He also found that when commercial produce was replaced with organic produce, pesticide exposure was reduced significantly. Among other concerns, OP pesticide exposure has been shown to contribute to deficiencies in neurodevelopment, becoming a factor in autism, Attention

Deficit Hyperactivity Disorder (ADHD) and other neurological impairments in developing children.

With the increasing usage of antibiotics among dairy farms and feed lots, antibiotic resistance is becoming a concern for many Americans. Organically raised animals are not given antibiotic additives; therefore, organic dairy and meats products do not contain these residues. Consistent exposure to low doses of antibiotic residues can also disrupt the normal flora of the human gut, reducing the number of healthful bacteria and leaving humans more vulnerable to harmful bacteria and illness. (Matthew Perrone, 2012)

Antibiotic-resistant bacteria can result from the overuse of antibiotics, and those bacteria can be passed from animals to humans through the food chain. Farms that use fewer antibiotics have been shown to have fewer resistant bugs, which may make their products safer when they reach the table. The presence of hormones is one of the most significant differences between conventional and organic milk products (Aalbaek, 2007).

More recently, an increase in production of genetically modified foods and the lack of labelling of these foods made many consumers to choose organic foods. Research on the health implication of Genetically Modified foods showed depressed immune systems, reproductive dysfunction, cancer, allergies, toxicity and more.

Organic food has plenty of advantages when compared to the non-organic food that have been processed with artificial preservatives and chemicals. Organic food is more nutritious than ordinary produce and it may help to lengthen people's lives and prevent disease (*Kendra Wright, 2010*).

Organic foods include fruits, vegetables, fishes, dairy products and meats that are not processed or refined. Although pesticides fight against pests and help maximize profit, they cause many implications to the health of consumers. To reduce the risk of health problems associated with chemical riddled foods, organic foods have emerged as the alternative choice. Organic foods are produced using natural fertilizers; manure and farming systems

which help conserve soil and water. Organic foods help prevent certain diseases such as Cancer, stroke and other heart diseases. Organic foods also contain salicylic acids which help prevent hardening of arteries and cancer. (*Kendra Wright, 2010*).

Organic foods protect the environment from pollution since chemicals which cause environmental pollution are not used in cultivating organic crops. Certain chemicals when used in crop production kill the micro organisms or even pollute nearby water bodies. Organic soils contain more micro organisms than conventional soils. These micro organisms store carbon in the soil which helps to maintain the global climate. Organic farming helps to conserve the soil and water (*Kontogeorgos, 2008*).

Organic foods have good taste and increased nutritious values as compared to non-organic foods. Organic foods have natural flavour since they do not contain additives which gives non-organic foods a different taste. They contain more mineral salts and other healthy chemicals than non-organic foods (*Haghiri, 2009*).

Organic foods have a better effect on animal reproduction than it had on non-organic foods. One of the causes of infertility in mammals is due to the large intake of chemical riddled food. Organic foods help to control or even lose unnecessary weight. The preservatives that are added to most foods such as canned food causes the consumers to gain unwanted weight. People eating organic foods have better sleeping habits.

“Transitional” food means that the product has been cultivated according to organic standards, but the soil and farm conditions haven’t yet completely met organic standards or the farm’s organic status is pending (*Padel and Foster, 2008*).

The advantages of organic foods might be highest for babies. The average baby is born with 200 toxins and carcinogens in its body. By the time kids reach their 2nd year, most have passed the lethal limit for the toxins. Feeding child organic food, decreases the chances of illnesses significantly.

Hence, especially for infants and children a raw organic food diet is incredibly important. Raw organic seeds grow while cooked and irradiated seeds don't.

In addition intensive farming is incredibly cruel to farm animals. One of the most outrageous advantages of organic foods is that organic farms treat their animals much more humane. They place a great emphasis on animal welfare (Shivraj Sing, 2010).

Conventional farming methods erode soil and use dangerous pesticides that may take centuries before they're gone. DDT thought to be harmless but appeared to be extremely bad for health still found in virtually all waters, human beings and animals in the world. Over time, artificial pest controls became less effective, and so more and more chemicals are being used and other inorganic methods were introduced that have a negative impact on the environment, the animals and people. (Schneeweis.I, 2010)

Acute, massive exposure to pesticides can cause significant adverse health effects. Food products have occasionally been contaminated with pesticides, which can result in acute toxicity. And most, if not all, commercially purchased food contains trace amounts of agricultural pesticides.” Hence, there is a need for organically grown food produce.

#### **D. Consumers perspective towards organic food product**

There is a growing concern about adverse affects of chemical fertilizer and pesticides. Looking to ill effects of chemicals, stress is being given to promote organic farming. Per ha consumption of fertilizers and pesticides by Indian is 91.5 Kg and 0.38Kg respectively which are far below than other countries. The population of India with a growth rate of about 2.3% has already crossed 100 crores. The unprecedented crisis in population will lead to increased demand for food. However there are several other reason for people to adopt organic farming practices in the interest of consumers health. (Laurie.E, 2009)

Demand for organic produce is growing. Most organic farms need fewer inputs from outside the farm since they make use of organic manure,

bio pesticides and bio herbicides, made out of available farm resources. Prices are often higher for organic produce, so profits may be satisfactory even if yields are lower. (Laurie.E, 2009)

Consumers give importance to nutrition in the choice of food, the degree of attention to the nutritional labels should also be well appreciated. It is a worldwide phenomenon that people have become more and more separated from the origins of their food. Worried about their health, consumers seek out certified products to protect themselves from toxins and carcinogens. With an increasing awareness of the domestic problems regarding pesticide poisoning and diseases from fresh food products, the Indian government over-hauled its approach to food safety (Srithamma, 2005).

A National Report (2012) found that 30 percent of consumers surveyed were not willing to pay more for organic products, while 44 percent said they would pay less than 10 percent more for organic products. Now-a-days consumers really want fresher, less processed, and more natural foods. Cultural differences also lead consumers to seek different values when making purchasing decisions on organic food products. Consumer behaviour involves a complex and sophisticated pattern that requires marketing research in order to understand the process. Consumer behaviour consists of ideas, feelings, experiences and actions, along with additional environmental factors like advertisements and price (Krystallis, 2005), (Gracia, 2008, Briz, 2006).

The premium price accruing to organic food products directly impacts the consumption levels (Aryal, 2009). Instead the demand for organic products must be seen in relative proportion of income that is usually spent on food consumption (Tsakiridou, 2008). Furthermore, consumer behaviour is a dynamic process because of continuous changes in ideas, perceptions and activities of the consumers. Attitude is shaped selectively to compromise consumers needs. Learning is gained by experience and it affects consumers' behaviour. Additionally, demography is especially of interest to marketers as it is important to see how population is changing in number and distribution of gender, age and other demographic characteristics and variables.

Education has also been reported as a significant factor affecting consumer attitudes towards organic food products. People with higher

education are more likely to express positive attitudes towards organic products (Gracia and Magistris 2007). Higher income households are also more likely to form positive attitudes and to purchase more organic food (Aryal, 2009)

### **E. Existing studies on organic food products and consumers interest**

There have been a considerable number of studies on organic consumers in many countries, especially in Europe and other western countries (Onyango, et al., 2007; Gracia and Magistris, 2007, Briz and Ward 2009; Essoussi and Zahaf 2008).

A Nationwide poll concluded that only 28 per cent of consumers actually sought out organic or limited pesticide-use produce, even though over seventy percent responded that organic produce provides better long-term health effects than conventionally grown produce .Some retailers maintain that appearance and price are prohibitive factors in consumer adoption of organic produce (Mejia, 2004).

According to Tsakiridou et al. (2008) a study on the Greek consumers seems to show that they are informed about environmental and health issues. Consumers' attitudes, in particular towards the health attributes and towards the environment, are the most important factors that explain consumers' decision-making processes for organic food products (Tsakiridou et al. 2008; Lea and Worsley 2005; Roitner Schobesberger et al. 2008; Magistris and Gracia 2008). More information about the organic food market increases consumers organic food knowledge, which is important because it positively influences consumers attitudes towards organic food products (Briz and Ward 2009; Gil and Soler 2006).

Consumer behaviour involves a complex and sophisticated pattern that requires marketing research in order to understand the process. Consumer behaviour consists of ideas, feelings, experiences and actions, along with

additional environmental factors like advertisements and price (Tsakiridou et al. 2008).

Family structure, marriage and divorce rates of individuals countries also have effects on consumption habits, for example, couples with children have many more health concerns when buying food than singles. The presence of children in the household has been regarded as a significant factor, which positively influences consumers' organic food attitudes as well as buying behavior (Essoussi and Zahaf 2008). Moreover, children have effects on changing the buying decisions of the parents when they are shopping in a supermarket. Children's age can be considered as a key factor, meaning that the higher the age of children in the household, the lower the propensity to buy organic food (Roitner-Schobesberger et al. 2008)

In general, the intention to purchase organic decreases with a limitation of knowledge and awareness towards those products, with many factors affecting consumers' perceptions and attitudes. In consumer behaviour theory, consumers make their own decisions based on an individual's intention to perform a behaviour, which is influenced by attitudes. Consumers' knowledge is a construct that effects how and what consumers decide to buy. People's knowledge is affected by the type and quality of information made available to consumers. Advertisements, processing, awareness of certifications and labels, all play a pivotal role in knowledge enrichment. Thus, knowledge and awareness are critical in the consumers' behaviour (Soler 2006).

Perhaps consumers are not even aware that the organic alternative exists, or they are not willing to look for organics outside of supermarkets or roadside stands (Byrne, 2007). Ireland and Falk stated that "a majority of groceries do not handle organics because of low availability and perceived consumer demand." Their study found that food retailers, who do handle organics, were almost unanimous in stating that availability was not a problem. Ott and Maligaya found that the majority of consumers would reject organics, if organics were of a lesser quality than conventionally grown produce. Since organics have grown to be a billion dollar industry (Waterfield, 2010), one may also assume genuine consumer demand.

## வீட்டில் காய்கறி தோட்டம் அமைப்போமா...!

காய்கறிகள் நமது அன்றாட வாழ்விற்கு மிகவும் முக்கியமானதாகும். ஆதுவும் குறிப்பாக சைவ உணவு உண்பவர்களுக்கு மிகவும் அவசியம். இவை உணவின் ஊட்டச்சத்தை அதிகரிப்பதோடு மட்டுமல்லாமல், உணவை ருசியாக்குகின்றன. ஊட்டச்சத்து வல்லுனர்களின் பரிந்துரைப்படி, ஒரு வயது வந்த நபர், சீரான திட்ட உணவிற்கு ஒரு நாளைக்கு 85 கிராம் பழங்களையும் 300 கிராம் காய்கறிகளையும் உண்ண வேண்டும். ஆனால் தற்போதைய காய்கறி உற்பத்தியை கணக்கிட்டு பார்க்கும் பொழுது ஒரு நபர் ஒரு நாளுக்கு 120 கிராம் காய்கறிகளையே பெற முடிகிறது. பாத்தி எண் காய்கறியின் பெயர் பருவம் 01. தக்காளி மற்றும் வெங்காயம் ஜூன் - செப்டம்பர் வீட்டுக்காய்கறித் தோட்டம் மேற்கண்ட கருத்துக்களை மனதில் கொண்டு நாம் நமது அன்றாட வாழ்விற்கு தேவை யான காய்கறிகளை வீட்டுக் காய்கறி தோட்டத்தில், நம்மிடம் உள்ள சுத்தமான தண்ணீர், சமயலறை மற்றும் குளியலறை கழிவு நீரை பயன்படுத்தி உற்பத்தி செய்யலாம். இதன் மூலம், உபயோகமில்லாத தண்ணீர் தேங்கி



நிற்பதையும், இதனால் ஏற்படும் சுகாதார கேட்டையும், சுற்றுச்சூழல் மாசுபாட்டையும் தடுக்க முடிகிறது. பயனுள்ள வகையில் காய்கறி உற்பத்தியை மேற்கொள்ள முடிகிறது. மிகக் குறைவான இடத்தில் சாகுபடி செய்யப்படுவதால், மிக எளிதான முறையில் நோய் மற்றும் பூச்சி கட்டுப்பாட்டை மேற்கொள்ள முடிகிறது. பூச்சிகொல்லி மருந்துகள் பயன்படுத்த வேண்டிய அவசியமில்லை. நோய் மற்றும் பூச்சி தாக்கிய பகுதிகளை செடிகளில் இருந்து அகற்றினால் போதுமானதாகும். இதனால் காய்க

றிகளில் நச்சு இரசாயனங்கள் படிவதை தவிர்க்க முடிகிறது. வீட்டுக்காய்கறி தோட்டத்திற்கான இடம் தேர்வு செய்தல் வீட்டின் பின்புறத்தில் அல்லது முன்புறத்தில் இருக்கும் காலி இடத்தை தேர்வு செய்யலாம். ஏனெனில் குடும்ப நபர்களை கொண்டு முறையாக பராமரிக்கவும், வீட்டின் சமயலறை மற்றும் குளியலறை கழிவு நீரை பயன்படுத்திக் கொள்ளவும் இது சலபமாக இருக்கும். காலியாக இருக்கும் இடத்தைப் பொறுத்தும், எத்தனை நபருக்கு காய்கறி தேவைப்படும் என்பதை பொறுத்தும் காய்கறி

தோட்டத்தின் அளவு நிர்ணயம் செய்ய வேண்டும். காய்கறித் தோட்டத்தை எந்த வடிவத்தில் வேண்டுமானாலும் அமைத்துக் கொள்ளலாம். ஆனால் முடிந்தவரை சதுரவடிவத்தைவிட செவ்வக வடிவ வீட்டுக்காய்கறி தோட்டத்தை தேர்வு செய்யலாம். ஊடுபயிர் சாகுபடி மற்றும் தொடர் சாகுபடி முறையை மேற்கொள்ள வேண்டும். நான்கு அல்லது ஐந்து நபர்கள் உள்ள ஒரு சராசரி குடும்பத்திற்கு தேவைப்படும் காய்கறியை உற்பத்தி செய்ய 5 சென்ட் இடம் இருந்தால் போதுமானதாகும். நிலம் தயார் செய்தல்: நிலத்தை 3040 செமீ ஆழத்திற்கு மண்வெட்டி கொண்டு கிளறிவிட வேண்டும். கற்கள், பதர்கள், களைகள் ஆகியவற்றை அகற்ற வேண்டும். 100 கிலோ நன்கு மக்கிய தொழு உரம் அல்லது மண்புழு ஏடுவை இட்டு நன்கு கலக்கி விட வேண்டும். தேவைக் கேற்ப 45 செமீ - 60 செமீ என்ற இடைவெளியில் பாரசீசால் அமைக்க வேண்டும். தேவைப்பட்டால் படுக்கை முறையிலும் சாகுபடி செய்யலாம்.

PAPER CLIPPING ON GROWING ORGANIC PRODUCTS

## METHODOLOGY

The methodology involved in the conduct of the research study entitled “**Consumers Perception towards Organic Food Products**” was carried out in the following steps.

### **A. Survey**

- i. Market survey on availability of organic food products
- ii. Consumers survey on perception towards organic food products

### **B. Analysis and interpretation of data collected**

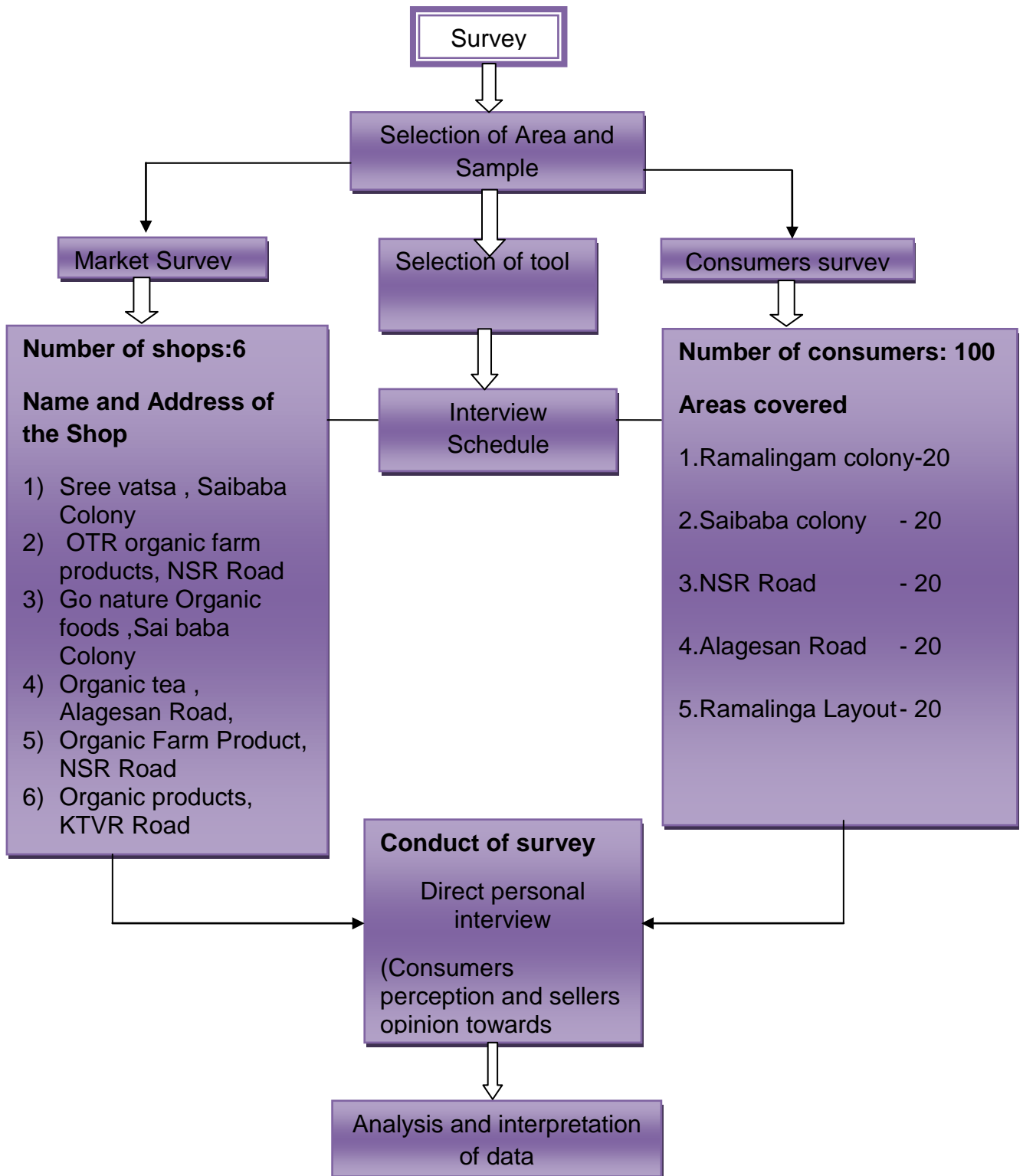
The schematic representation of the research design is given in Figure I.

### **A. Survey**

Survey is the field that studies the sampling of individual from a population with a view towards working statistical inferences about the population using the sample (Grove, 2009). This is a type of data collection known as self- report data, which means that individuals complete the survey (or provide the information) themselves. It is also a method of collecting information or data as reported by individuals. In order to obtain a clear picture on the Consumers perception towards Organic foods, both Market and Consumer Survey were conducted.

#### **i. Market survey on organic food products**

A market survey is a tool used to get the information about the spending characteristic and purchasing power of the consumer with in the business and geographic area of operation ([www.chow.cow](http://www.chow.cow)). Hence in order to obtain information on the markets selling and dealing with organic foods, a market survey was conducted in the following steps,



**SCHEMATIC REPRESENTATION OF THE RESEARCH DESIGN**

## FIGURE I

- 1. Selection of Area**
- 2. Selection of Sample**
- 3. Selection of tool and**
- 4. Conduct of the survey and collection of data**

### **1. Selection of Area:**

Coimbatore also referred to as the “Manchester of South India” is the second largest city in Tamil Nadu, next to Chennai. Coimbatore city has a population of 1,061,447 people. Organic foods selling shops can be seen almost everywhere in the city. The high standard of education, changing attitude towards health further supported the existence of these shops. The investigator conducted the market survey in the busy area of Saibaba colony which is the northern part of Coimbatore city since the area have organic shops.

### **2. Selection of sample**

Sampling is the processes of obtaining information about an entire population by examining only a part of it (Kothari, 2007). Sample is a set of observation drawn from a population by a defined procedure and the size of a sample is the number of element in it (Ramchandran 2009).

Although attempts have been made to find out the pattern of organic foods available in the market, detailed studies on the sellers perception towards organic products remain understudied. Hence, for studying the sellers knowledge and practice, six shops dealing with organic food products were selected based on “purposive sampling” technique (Plate I).



# PLATE 1

# **SHOPS SELECTED FOR THE MARKET SURVEY**

## **3. Selection of tool**

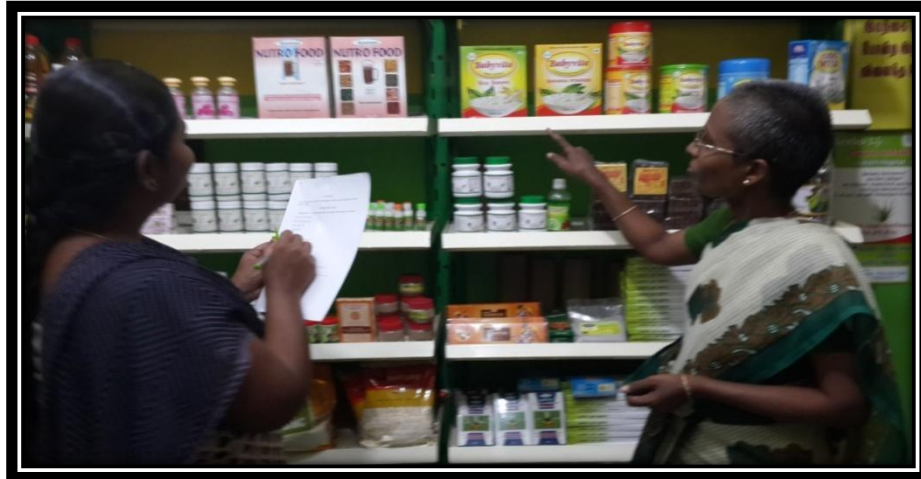
A schedule is a structural set of question which are usually asked orally and recorded in writing by the interviewer (Sajeevan,2009). Borse (2005) define an interview as conversation between two or more people, here questions are asked by the interviewer to draw out a response from the interviewee. An interview schedule was framed to collect necessary information on background details of the shop, year of establishment, availability of organic food products in the shop, extent of preference by the customer, cost of organic food product, type of organic products available, marketing, source of supply of organic food product etc., were included in the questionnaire formulated for the sellers.

Kothari (2008) point that, pretesting refers to the testing of the schedule on a small sample of respondents to identify and eliminate potential problems. The interview schedule was pretested with the shopkeeper using a pilot study. Based on the information and suggestions given by them, the interview schedule was modified and finalized. The interview schedule thus finalized is given in Appendix I.

## **4. Conduct of Survey and collection of data**

Data are the basic input to any decision making process in a business. The processing of this data gives statistical importance to the study and can be classified into primary and secondary data. Collection of data refers to a purposive gathering of information relevant to the subject matter of the study from the units under investigation (Gupta, 2010). The investigator collected the information using the interview schedule (plate II) in the selected shops. The investigator visited each of the selected shops and explained the purpose of the study and utilized their leisure time to collect the data. The questions

were put forth one by one and responses were carefully recorded by the investigator.



## PLATE - 2

### CONDUCT OF MARKET SURVEY

#### ii. **Consumers survey on perception towards organic food products**

Since the organic foods are gaining popularity, it is equally important to understanding Consumers Knowledge, Attitudes towards organic foods and their consumption pattern. To reach this objective, a survey was conducted to elicit information on the consumers perception towards Organic foods and the pattern of the consumption among the selected consumer. The consumer survey was conducted in the following steps,

- 1. Selection of Area**
- 2. Selection of Sample**
- 3. Selection of tool and**
- 4. Conduct of the survey and collection of data**

#### **1. Selection of Area**

Consumers of organic products are widely spread across Coimbatore city. To study the consumers perception towards organic products, shops located in Saibaba colony, Ramalingam colony, NSR Road, Alagesan Road, Ramalinga Layout in the Northern Part of Coimbatore city were the area selected for the study.

#### **2. Selection of Sample**

Sampling is the process of learning about population on the basis of sample drawn from it. Nangie (2008) refers it as a representation part or a single item from a larger whole or group especially when present for inspection or shown as evidence of quality. A total of 100 consumers were selected based on “Purposive sampling” technique for the study.

### **3. Selection of tool**

To reach this objective through a reliable instrument, a questionnaire was designed that covered aspects such as their general opinion, health benefits, animal health, health hazards and economic benefits of Organic Products. A total of 25 questions were included under these aspects. The questionnaire was pretested with 10 consumers and needed modifications were carried out before the actual data collection. The questionnaire thus finalized is given in Appendix II.

### **4. Conduct of the survey and collection of data**

Data collection is nothing but how the information is gathered. There are various methods of data collection. For the present study, survey method was used. Consumers were briefed about the objectives of the study and requested to give their time to fill up the questionnaire (Plate III).



### PLATE 3

## CONDUCT OF CONSUMERS SURVEY

### **B. Analysis and interpretation of data**

After the transcription of data is over they were summarized and arranged in compact form for further analysis. Interpretation of collected data is not only necessary but unavoidable in research. Reddy (2004) opined that the interpretation depends on the judgment and skill of the researcher. It involves breaking down of complex factors into simple ones and putting the parts in new arrangement for purpose of interpretation (Cauvery 2003). The data thus collected for market information and consumer perception towards organic food products were checked for its ambiguity and then it was consolidated, tabulated and analyzed and presented in Chapter IV, Results and Discussion. .

## RESULTS AND DISCUSSION

The findings of the study on “**Consumers Perception towards Organic Food Products**” are discussed under the following major headings,

### **D. Market survey**

- g. Socio-economic profile of the sellers
- h. Back ground information of the shops
- i. Organic products available in the shops
- j. Source and mode of procuring organic products
- k. Methods to promote sale of organic products and
- l. Sellers perception towards organic foods

### **E. Consumers survey**

#### **c. Socio- economic profile of the consumers**

#### **b. Consumers Knowledge towards organic foods products**

- iii. Reasons for opting organic products
- iv. Benefits of organic products

#### **F. Consumer’s knowledge towards hazards of inorganic foods**

- iv. Consumers attitudes towards organic products and
- v. Constraint in purchasing the organic product
- vi. Consumer attitudes towards dependence on organic foods
- di. General perception and awareness on organic foods
- vi. Reasons for high cost of organic foods
- vii. Consumers Perception towards managing the expenditure while purchasing organic foods
- viii. Economic benefits accrued by producing organic food
- ix. Changes observed after consumers organic foods over years
- x. Suggestions for promoting better consumption of organic foods

**A. Market Survey**

**a. Socio-economic profile of the sellers**

Information on Socio-economic profile of the sellers such as age, gender, educational status and income of the family were collected and presented in Table I.

<b>S.No</b>	<b>Socio-economic profile</b>	<b>Number (6)</b>	<b>Percentage</b>
<b>1</b>	<b>Age</b>		
	20-30	1	17
	30-40	4	67
	Above 40	1	16

**TABLE – I**

**SOCIO-ECONOMIC PROFILE OF THE SELLERS**

<b>2</b>	<b>Gender</b>		
	Male	1	16
	Female	5	84
<b>3</b>	<b>Education status</b>		
	Secondary	1	17
	Higher secondary	2	33
	Graduates	3	50
<b>4</b>	<b>Income of the family *</b>		
	Low income (Rs.3000-5000)	-	-
	Middle income (Rs.5,000-10,000)	2	33
	High income (above Rs.10,000)	4	67
<b>5</b>	<b>Years of experience</b>		
	0-5	3	50
	5-10	3	50

\*HUDCO Income classification, 2012

The above table revealed that 67 percent of the sellers belonged to the age group of 30-40 followed by 17 per cent of the sellers in the age group of 20-30 years. Out of six sellers surveyed, there were 5 Female and 1 Male. With regard to the educational status, 50 percent were graduates while 33 per cent had higher secondary education.

Majority (67 per cent) of them belonged to High income group according to HUDCO income classification. Fifty percent of them had 0-5 years of experience while 50 percent had 5-10 years of experience in running their shop. It is clear that these shops have mushroomed in the last 10 years.

#### **b. Back ground information of the shops**

Back ground information of the shop on aspects like type of shop, approximate monthly turn over, shop timing and any other branches, were collected. The data is presented in Table II.

**TABLE II**  
**BACK GROUND INFORMATION ON THE SHOPS**

<b>S.No</b>	<b>Particulars</b>	<b>Number (6)</b>	<b>Percentage</b>
<b>1</b>	<b>Type of shop</b> Rented Own	4 2	67 33
<b>2</b>	<b>Floor area of the shop</b> Less than 500 sq.ft 500-1000 Sq.ft More than 1000 sq.ft	1 3 2	17 50 33
<b>3</b>	<b>Monthly turn over</b> Less than 10,000 10,000-25,000 More than 25,000	2 1 3	33 17 50
<b>4</b>	<b>Shop timing</b> 8 AM to 9 PM 9 AM to 9 PM 10 AM to 9 PM	1 2 3	17 33 50
<b>5</b>	<b>Other branches</b>	1	17

The above table reveals that among the shops selected, 67 per cent of the sellers run their business in the rented shop while 33 percent of the sellers had own shop to run their business. The data in the table also reveals that majority (50 per cent) of the shops had 500- 1000 sq.ft floor area. If the shops have more floor area, it facilitates free movement of consumers, good air circulation and availability of more variety/ range of food products so that consumers will have many choices to choose. For majority (50 per cent) of the sellers, the monthly turnover was more than Rs. 25,000/- . The shop timing were 10 am- 9pm in majority (50 per cent) of the shops surveyed. Only one shop had a branch of shop.

### **c. Organic products available in the shops**

Information regarding the varieties of organic foods available in the shop is presented in Table III.

**TABLE III**  
**ORGANIC PRODUCTS AVAILABLE IN THE SHOPS**

S.No	Category of Organic Foods*	Number (6)	Percentage
1	Medicinal items	6	100
2	Fresh fruits and vegetables	5	83
3	Processed /semi processed foods	4	67
4	Cereals and pulses	4	67
5	Cosmetics	3	50

\*Multiple response

More than 30 different varieties of organic foods were available in the shops such as Cereals, pulses, spices, oils, vegetables etc, (Plate IV). From the above table, it is clear that cent percent of the shop surveyed had medicinal items. Although these shops sell organic food items, they were also specialized in different variety of medicinal items such as ayurvedic oil for knee and joint pain and antibiotics, etc., Eighty three per cent of the shops surveyed sell fruits and vegetables. Processed /Semi processed foods and cereals and pulses were available in 67 per cent of the shops. Fifty per cent shop had cosmetics also.

Among these, fresh vegetables are the most popular ones. Some shops sourced vegetables from Tamil Nadu Organic Certification Department-INDIA (TNOCD - INDIA). From among the shops surveyed, Sree Vatsa organic farm products are more popular among the consumers .

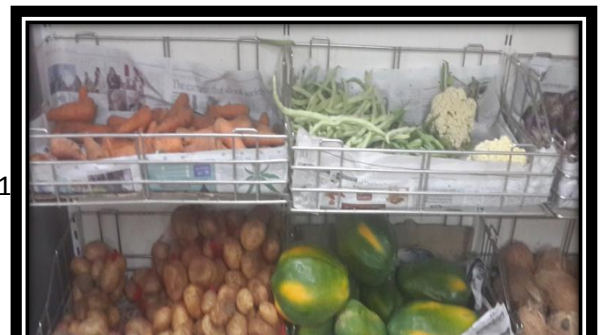
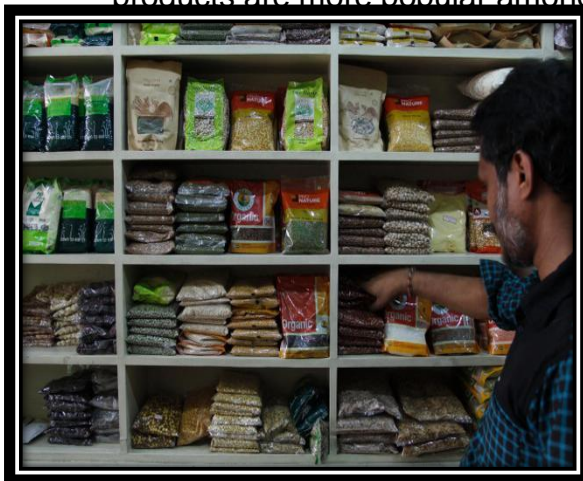




PLATE 4

#### **AVAILABILITY OF ORGNIC PRODUCTS IN THE SELECTED SHOPS**

Monday is the most preferable day for purchasing vegetable, since TNOCD-INDIA supply vegetable on this day. It was also observed that all the shop owners gave only general information on the items available since it is very difficult to give detailed information. All the sellers expressed that day by day new variety of organic foods are introduced into the market.

##### **d. Source and mode of procuring organic products**

In at present, the organic foods are gaining momentous importance. Concurrently its availability in the shops is also on the increase. Specific details on source of procuring organic foods, and mode of purchase is given in Table IV.

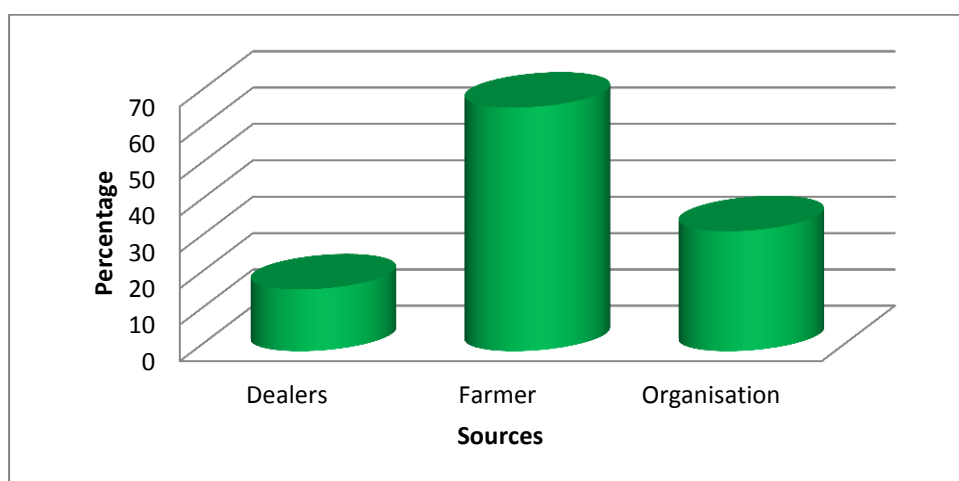
**TABLE IV**

**SOURCE AND MODE OF PROCURING ORGANIC PRODUCTS**

<b>S.No</b>	<b>Details</b>	<b>Number (6)</b>	<b>Percentage</b>
<b>1</b>	<b>Source of procuring organic products*</b>		
	Farmer	4	67
	Organisation	2	33
	Dealers	1	17
<b>2</b>	<b>Mode of purchase</b>		
	Cash	5	83
	Credit	1	17

\*Multiple response

Organic foods in majority (67 per cent) of the shops were procured from the farmers while 33 per cent of the sellers procuring from some organisation like Tamil Nadu Organic Certification Department. Eighty three per cent of the sellers made cash payment while 17 per cent made credit card payment. The source of procuring organic products is given in (Figure 2).



**SOURCE OF PROCURING ORGANIC PRODUCTS**

**FIGURE 2**

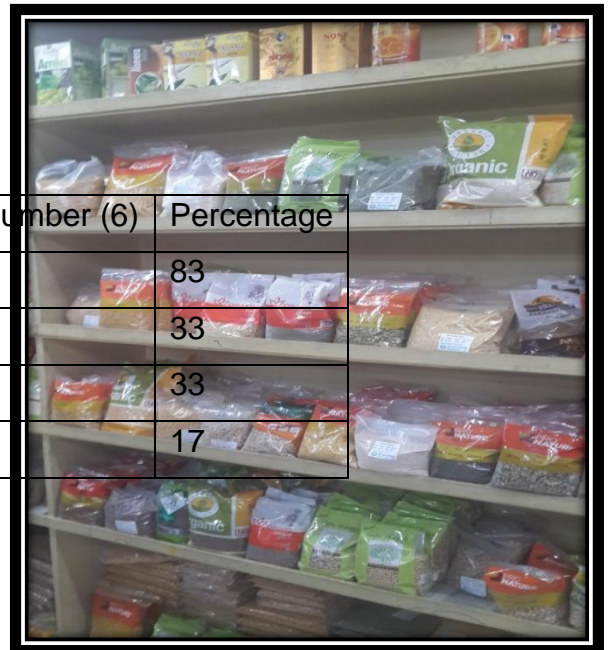
**e. Methods adopted to promote sale of organic products**

Table V presents the methods adopted to promote sales of organic products

**TABLE V**  
**METHODS ADOPTED TO PROMOTE SALE OF ORGANIC PRODUCTS**

\*Multiple response

From the above table, it could be revealed that majority (83 percent) of the shops display the organic foods (Plate V) to promote selling. Shop owner/ manager stated that the number of racks allotted for these types of foods are also on the increase since new organic foods are introduced in the market every day. In order to encourage the sales of organic foods introduced newly into the market, thirty three percent of sellers gives offer and discounts to while 17 per cent advertised their products.



**PLATE 5**

**PRODUCT DISPLAY THE SELETED SHOP**

**f. Sellers perception towards organic food products**

This part of the study discusses the details on the sellers perception towards organic food products and the data is presented in Table VI.

**TABLE- VI**

**SELLERS PERCEPTION TOWARDS ORGANIC FOOD PRODUCTS**

<b>S.No</b>	<b>Particulars</b>	<b>Number (6)</b>	<b>Percentage</b>
1	Satisfied running this shop	4	67
2	Only regular customers were buying the product	4	67
3	Consumers felt that organic products quite expensive	3	50
4	Organic product sold rapidly	3	50
5	Getting organic product is a difficult process	3	50

6	Consumers do not realize the importance of organic products	2	33
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\*Multiple response

Majority (67 per cent) of the sellers were satisfied running the shop because they were happy that they sell healthy and safe food products to their consumers. Sixty seven per cent of sellers stated that only regular customers visit their shops. Fifty per cent of the expressed sellers that the consumers felt that organic products are quite expensive.

From the above table, it is clear that fifty per cent of the sellers felt that organic products are sold rapidly. The reasons might be attributed to the increased health and environment concerns among the consumers. Fifty percent of the sellers expressed that getting organic products is difficult process. Thirty three per cent of the sellers expressed that consumers do not realize the importance of organic products.

## **B. Consumers Knowledge and Perception Towards Organic Food Products**

- a. Socio- economic profile of the consumers
- b. Consumers knowledge towards organic food products
- c. Consumer attitude towards organic products
- d. General perception and awareness on organic foods

### **a. Socio - economic profile of the consumers**

Socio economic profile of the consumers were studied and are presented in Table VII.

**TABLE VII**

### **SOCIO-ECONOMIC PROFILE OF THE CONSUMERS**

<b>S.No</b>	<b>Particulars</b>	<b>Percentage (N=100)</b>
<b>1</b>	<b>Gender</b>	
	Female	60

	Male	40
<b>2</b>	<b>Age</b>	
	20-30	25
	30-40	30
	Above 40	45
<b>3</b>	<b>Educational status</b>	
	Primary	-
	Secondary	20
	Higher education	20
	Graduated	60
<b>4</b>	<b>Income of the family *</b>	
	Low income (Rs.3000-5000)	10
	Middle income (Rs.5,000-10,000)	40
	High income (above Rs. 10,000)	50
<b>5</b>	<b>Occupation</b>	
	Business	40
	Employed	30
	House wife	30
<b>6</b>	<b>Type of family</b>	
	Nuclear	60
	Joint	40
<b>7</b>	<b>Size of the family</b>	
	Small (1-3 members)	35
	Medium (4-6 members)	40
	Large (Above 6 members)	25

\*HUDCO Income classification, 2012

The data in

30 years. Sixty per

cent of them were graduates while it is also noted that none of them were illiterates. According to HUDCO (2012), 50 percent of the consumers belong to high income group forty percent of the consumers were belonging to middle income families.

Regarding the occupational status, Forty per cent were involved in business, thirty percent were employed while thirty per cent were housewife.

Family is the smallest basic unit of the society. Among the selected families, majority (60 per cent) of them belonged to nuclear family while about 40 were living in joint family. In a nuclear family, generally the homemakers take the responsibilities to buy food items while in the joint families the home makers, daughters or in- laws used to buy the food items. Regarding the size of the family, majority (40 percent) of the consumers were belonging to medium families.

**b. Consumers Knowledge towards organic foods products**

Consumers’ knowledge towards organic food product were studied in terms of the following,

- i. Reasons for opting organic products**
- ii. Benefits of organic products**
- iii. Consumer’s knowledge towards hazards of inorganic foods**

**i. Reasons for opting organic food Products**

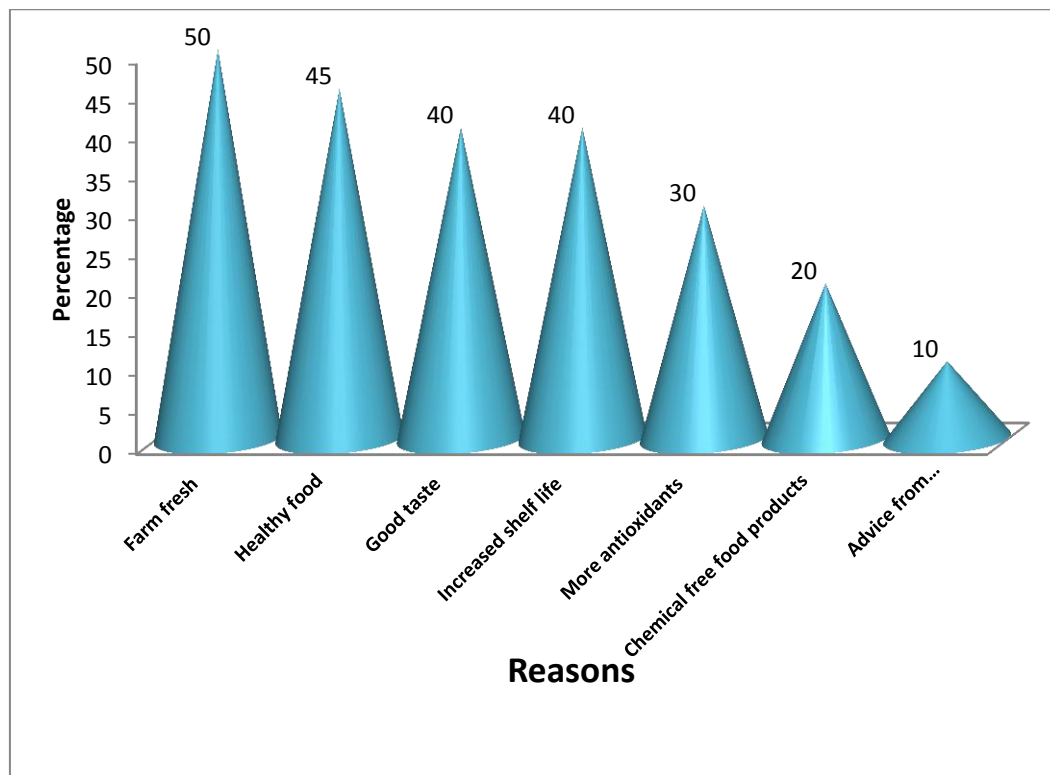
Reasons for opting organic food products is presented which states the consumers knowledge is presented in Table VIII.

**TABLE VIII  
REASONS FOR OPTING ORGANIC FOOD PRODUCTS**

<b>S.No</b>	<b>Reasons for opting organic food products*</b>	<b>Percentage (N=100)</b>
1	Farm fresh	98
2	Healthy food	92
3	Good taste	90
4	Increased shelf life	90
5	More antioxidants	30
6	Chemical free food products	20
7	Advice from doctors/Friends/Media/Advertisement	10

\*Multiple responses

The above tabulated data reveals that 98 per cent of consumers opt organic food products because it is farm fresh. Ninety two per cent of the consumers opting that the reason opting organic food products its health benefits while 90 percent going for it for its taste and is increased shelf life. Groeben (2012) also concluded taste preferences is one of the reasons for people choosing organic products. The other reasons expressed by the consumers were chemical free foods, more antioxidants and advice given by doctors, friends and media (Figure 3).



**REASONS FOR OPTING ORGANIC FOOD PRODUCTS**

**FIGURE 3**

**ii. Consumers knowledge towards benefits of Organic products**

Details regarding the knowledge of the consumers towards benefits of organic products are given in Table VIII.

**TABLE IX**  
**CONSUMERS KNOWLEDGE TOWARDS BENEFITS OF ORGANIC PRODUCTS**

<b>S.No</b>	<b>Benefits*</b>	<b>Percentage (N=100)</b>
1	More nutrient contribution	80
2	Reduces soil erosion	54
3	Increases soil fertility	20
4	Conserves water	15
5	Reduces pollution (air, water, soil)	10
6	Uses less energy	5

\*Multiple responses

From the above table, it could be revealed that a majority Eighty percent of consumers expressed the health benefits of organic foods that it contributes more nutrients. Fifty four percent of the consumers felt that the production of organic food reduces soil erosion while 20 percent opined that it increases soil fertility. Groeben (2012) also found that consumers raised concerns about the effects of conventional farming practices on the environment. The other benefits as expressed by consumer were conserving water, reduces pollution and use of less energy in organic farms.

**iii. Consumers knowledge towards health hazards of inorganic foods**

Details regarding the knowledge of the consumers towards health hazards of inorganic foods is given in Table X

**TABLE X**  
**CONSUMERS KNOWLEDGE TOWARDS HEALTH HAZARDS OF INORGANIC FOODS**

<b>S.No</b>	<b>Health hazards *</b>	<b>Percentage (N=100)</b>
1	High doses of antibiotics, growth hormones to animals	90
2	Affects pregnant women	55
3	Puberty in early years	50
4	More pesticide residues in food	40
5	Development delays	30
6	Behavioural disorders	15
7	Fits	5

\*Multiple response

The above tabulated data reveals that ninety per cent of consumers were too knowledgeable that inorganic foods affect both human and the animal health, since it indulges in high doses of antibiotics and growth hormone. Groeben (2012) also stated that concerns about the animal welfare is one of the reasons why people choose organic products. Fifty five per cent of the consumers opined that consumption of inorganic foods affects pregnant women.

It is found that majority (50 per cent) of the consumers felt puberty in early years as a health hazard due to consumption of inorganic foods. The other responses were more pesticide residues, development delays, behavioural disorder, Motor dysfunction and fits as expressed by the consumers.

**c. Consumers attitudes towards organic products**

Consumers attitudes towards organic product were assessed in terms of the following,

- i. Constraint in purchasing the organic product**
- ii. Consumer attitudes towards dependence on organic foods**

**i. Constraint in purchasing Organic products**

This part of the study discusses the information on constraint while purchasing the organic products. The data is presented in Table XI.

**TABLE XI**  
**CONSTRAINT IN PURCHASING ORGANIC PRODUCTS**

<b>S.No</b>	<b>Constraint in purchasing organic products</b>	<b>Percentage (N=100)</b>
1	High cost	45
2	Available only limited products/ choices	35
3	Available only on limited days	20

It is revealed from the above table that consumers faced constraint while purchasing the organic product. Of the constraint faced, high cost of the organic products was the major constraint faced as expressed by 45 per cent of the consumers. Thirty five per cent of the consumers stressed that only limited products were available. Gardyn, (2009) also stated that there is a common perception that organic foods are difficult to find and much more expensive than conventional foods. Organic Foods Trends Tracker survey (2009), also reported that price remains the biggest barrier for consumers who don't eat organic food.

**ii. Consumers attitudes towards dependence on organic foods**

Eighty five percent of the consumers were solely dependent on organic foods while 15 percent consumed other inorganic foods along with organic foods.

**d. General perception and awareness towards organic foods**

General perception and awareness of the consumer's towards organic foods were assessed in terms of the followings,

- i. Reasons for high cost of organic foods**
- ii. Consumers Perception towards managing the expenditure while purchasing organic foods**
- iii. Economic benefits accrued by producing organic food**
- iv. Changes observed after consumer organic foods over years**
- v. Suggestions for promoting better consumption of organic foods**

**i. Reasons for high cost of organic foods**

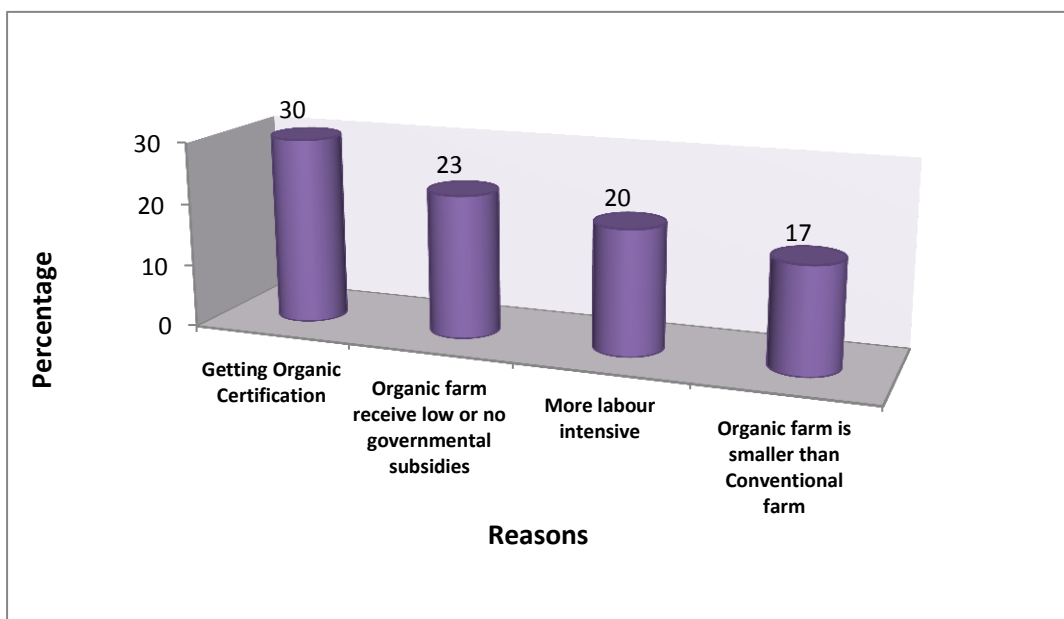
The data regarding the consumers perception towards reasons for high cost of organic foods were collected and presented in Table XII

**TABLE XII**  
**REASONS FOR HIGH COST OF ORGANIC FOODS**

<b>S.No</b>	<b>Reasons for high cost of Organic food*</b>	<b>Percentage (N=100)</b>
1	Getting Organic certification	30
2	Organic farm receive low or no governmental subsidies	23
3	More labour intensive	20
4	Organic farm is smaller than conventional farm	17

\*Multiple response

From the table, it could be revealed that majority (30 per cent) of the consumers were aware that organic certification makes the organic foods more expensive followed by 23 per cent expressing that the reason for organic foods being more expensive is that they receive less or no government subsidiaries. The other reasons as expressed by the consumers were more labour intensive and Organic farm is smaller than conventional farm. (Figure 4).



### REASONS FOR HIGH COST OF ORGANIC FOODS

FIGURE 4

#### i. Consumers Perception towards managing the expenditure while purchasing organic foods

The data regarding the consumers perception towards managing the expenditure while purchasing organic foods is presented in Table XIII.

**TABLE XIII**  
**CONSUMERS PERCEPTION TOWARDS MANAGING THE EXPENDITURE WHILE PURCHASING ORGANIC FOODS**

S.No	Aspects*	Percentage (N=100)
1	Shop at farmers market	45
2	Buy limited organic food products	30
3	Shops around	20
4	Buy seasonal food products	20
5	Avoiding unnecessary expenditure on luxurious things	5

\*Multiple responses

Table XIII reveals that a majority (45 per cent) of the consumers manage the expenditure on organic foods through purchasing from the farmers market. The other ways of managing the cost as expressed by the consumers were to buy limited inorganic food products and Shopping around and buying seasonal food products and avoiding unnecessary expenditure on luxurious things.

**iii. Economic benefits accrued by producing organic food.**

The Consumers Perception towards the economic benefits of producing Organic Products by the consumers is given in Table XIV.

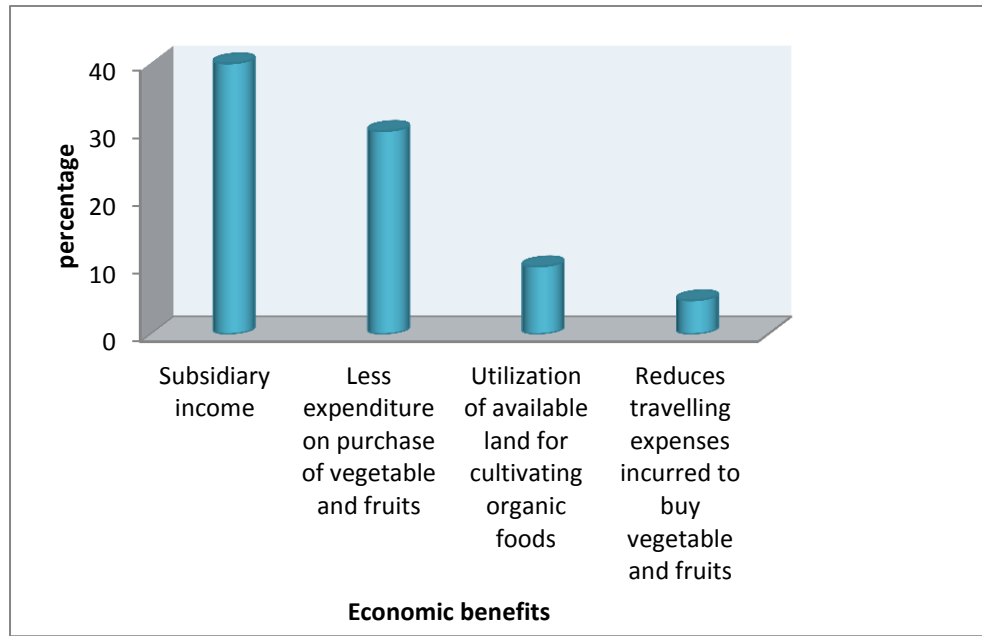
**TABLE XIV**

**ECONOMIC BENEFITS ACCRUED BY PRODUCING ORGANIC FOOD**

<b>S.No</b>	<b>Economic benefits</b>	<b>Percentage (N=100)</b>
1	Subsidiary income	40
2	Less expenditure on purchase of vegetable and fruits	30
3	Utilization of available land for cultivating organic foods	10
4	Reduces travelling expenses incurred to buy vegetable and fruits	5

The data in the above table reveals that 40 per cent of the consumers felt subsidiary income as the economic benefit derived by producing organic fruits and vegetables while 30 per cent realized less expenditure on fruits and vegetables by growing them in their kitchen garden as the economic benefits.

Due to organic farms, money stays within the community and strengthens their local economy. More money goes directly to the farmers.(Figure 5)



## **ECONOMIC BENEFITS ACCRUED BY PRODUCING ORGANIC FOOD**

**FIGURE 5**

### **iv. Changes observed by the consumer after consuming organic foods over years**

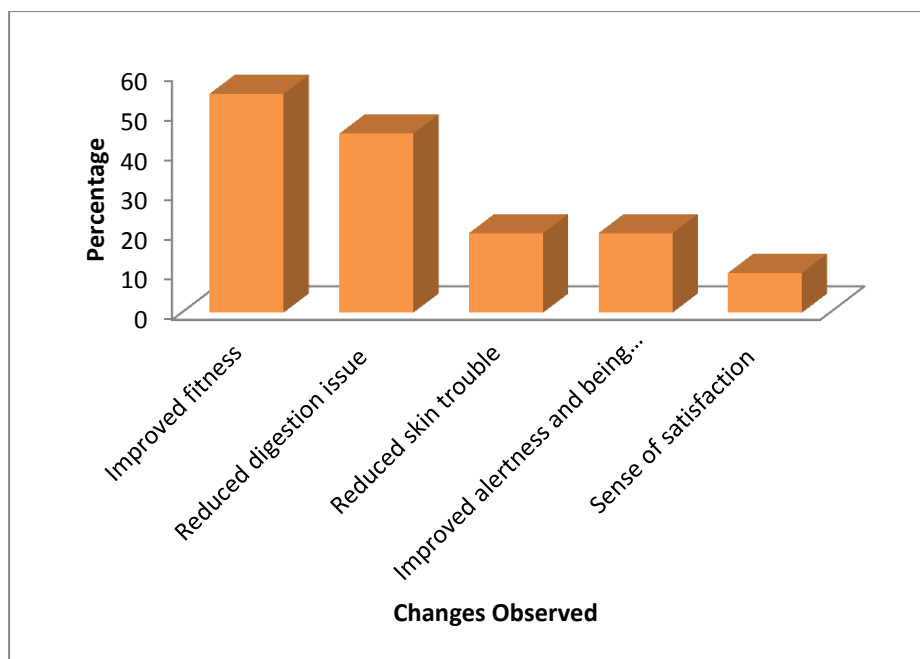
This part of the study discusses changes observed by the consumers after consuming organic foods over years. The data is presented in Table XV

**TABLE XV**  
**CHANGES OBSERVED BY THE CONSUMER AFTER CONSUMING**  
**ORGANIC FOODS OVER YEARS**

<b>S.No</b>	<b>Changes *</b>	<b>Percentage (N=100)</b>
1	Improved fitness	55
2	Reduced digestion issue	45
3	Reduced skin trouble	20
4	Improved alertness and being active	20
5	Sense of satisfaction	10

\*Multiple response

From the table, it is clear that majority (55 per cent) of the consumers have observed improved fitness as an result of consuming organic foods over years. Forty five per cent observed reduced digestion issues due to consumption of organic foods. The other changes observed beneficial to health as expressed by the consumers were reduced skin trouble, and improved alertness and activeness. Sense of satisfaction. The results showed the tremendous health benefits of organic foods (Figure 6).



**CHANGES OBSERVED BY THE CONSUMER AFTER CONSUMING ORGANIC FOODS OVER YEARS**

**FIGURE 6**

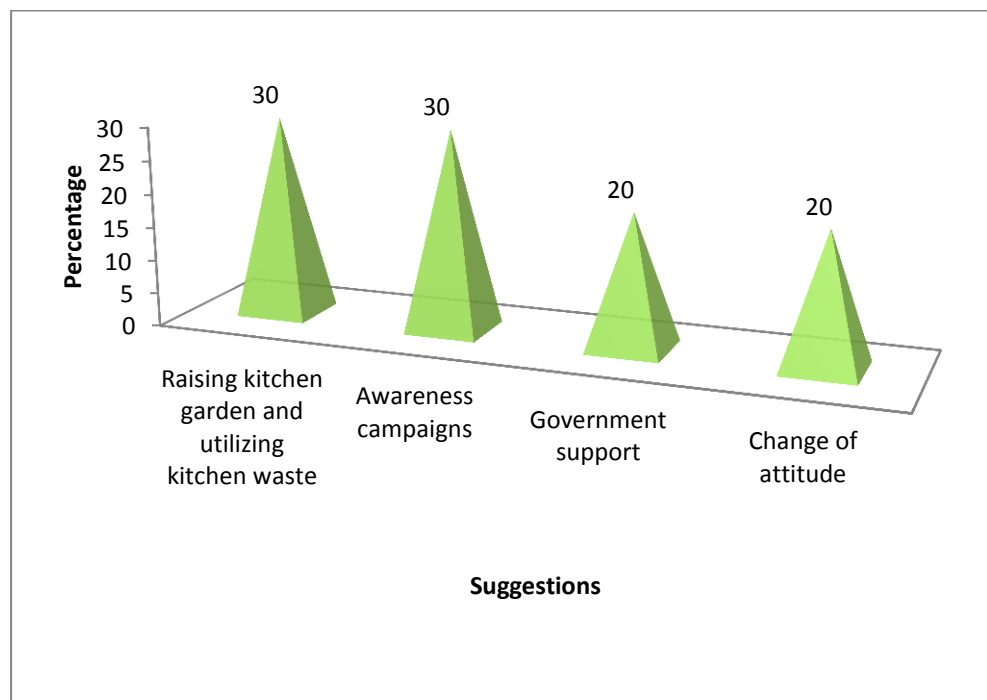
**v. Suggestions for promoting better consumption of organic foods**

Table XVI presents the suggestions given by the consumers for promoting better consumption of organic foods.

**TABLE XVI  
SUGGESTIONS FOR PROMOTING BETTER CONSUMPTION OF ORGANIC FOODS**

<b>S.No</b>	<b>Suggestion</b>	<b>Percentage (N=100)</b>
1	Raising kitchen garden and utilizing kitchen waste	30
2	Awareness campaigns	30
3	Government support to promote organic products	20
4	Change of attitude towards high cost	20

The data in the above table reveals that a majority (30 per cent) of the consumers suggested raising kitchen garden and utilizing the kitchen waste as manure to minimize the risk of exposure to pesticide thereby promoting consumption of organic foods while 30 per cent felt that awareness campaign would promote consumption of organic foods among consumers. Change of attitudes towards high cost of organic products and government support to the farmers to encourage Organic farming were the other suggestions given by the consumers (Figure 7).



**SUGGESTIONS FOR PROMOTING BETTER CONSUMPTION OF ORGANIC FOODS**  
**FIGURE 7**

## SUMMARY AND CONCLUSION

In recent years Organic farming has gone through a quite dramatic growth and development in many high income countries. The demand for organic products has also grown. Organic farming represents an alternative and more holistic view of agriculture and food production, which directly addresses the problems faced in many areas of conventional agriculture practice. Concerns for environment and nature, live stock welfare, food quality are thus essential elements of the philosophy behind organic farming.

The growing prosperity of organic food industry indicates a greater health concern from the public because organic food contains more nutrients that are essential for good health. The lower pesticides residues is another advantage of organic food because pesticides exposure can be the cause of various health problems.

The values and principles of organic farming that guides the future development should be well appreciated. The change from conventional farming to organic one will be gradual and perhaps slow. Nevertheless, transition into organic farming is inevitable considering its enormous economic and social benefits of having sustainable and nutritious food production, reducing air and water pollution and restoration of farmland biodiversity. Consumer-oriented approach is also important to understand and promote organic farming. Efforts are needed to communicate the benefits of organic foods and farming to get potential consumers. Hence, the present study titled “Consumer Perception towards Organic Food Products” was undertaken with the main objective of understanding the sellers and buyers perception towards organic foods.

### ***The findings of the study are summarized as follows,***

- Sixty Seven percent of the sellers belonged to the age group of 30-40 followed by 17 per cent of the sellers in the age group of 20-30 years. Out of six sellers surveyed, there were 5 Female and 1 Male. With regard to the educational status, 50 percent were graduates while 33 per cent had higher secondary education.

- Majority (67 per cent) of them belonged to High income group according to HUDCO income classification. Fifty percent of them had 0-5 years of experience while 50 percent had 5-10 years of experience in running their shop. It is clear that these shops have mushroomed in the last 10 years.
- Sixty Seven per cent of the sellers run their business in the rented shop while 33 percent of the sellers had own shop to run their business.
- More than 30 different varieties of organic foods were available in the shops such as Cereals, pulses, spices, oils, vegetables etc., Cent percent of the shop surveyed had medicinal items. Although these shops sell organic food items, they were also specialized in different variety of medicinal items such as ayurvedic oil for knee and joint pain and antibiotics, etc., Eighty three per cent of the shops surveyed sell fruits and vegetables. Processed /Semi processed foods and Cereals and Pulses were available in 67 per cent of the shops. Fifty per cent shop had Cosmetics also.
- Organic foods in majority (67 per cent) of the shops were procured from the farmers while 33 per cent of the sellers procuring from some organisation like Tamil Nadu Organic Certification Department. Eighty three per cent of the sellers made cash payment while 17 per cent made credit card payment.
- Eighty three percent of the shops display the organic foods to promote selling. Thirty three percent of sellers gives offer and discounts to while 17 per cent advertised their products.
- Majority (67 per cent) of the sellers were satisfied running the shop because they were happy that they sell healthy and safe food products to their consumers. Fifty per cent of the expressed sellers that the consumers felt that organic products are quite expensive. Fifty per cent of the sellers felt that organic products are sold rapidly. Fifty percent of the sellers expressed that getting organic products is difficult process. Thirty three per cent of the sellers expressed that consumers do not realize the importance of organic products.

- Majority (60 per cent) of the consumers surveyed were females. With regard to age, 45 percent were above 40 years followed by 30 percent of the consumers belonging to the age group of 30-40 years while about 25 percent in the age group of 20-30 years. Sixty per cent of them were graduates while it is also noted that none of them were illiterates. According to HUDCO (2012), 50 percent of the consumers belong to high income group forty percent of the consumers were belonging to middle income families.
- Regarding the occupational status, Forty per cent were involved in business, thirty percent were employed while thirty per cent were housewife. Among the selected families, majority (60 per cent) of them belonged to nuclear family while about 40 were living in joint family. Regarding the size of the family, majority (40 percent) of the consumers were belonging to medium families.
- Ninety eight cent of consumers opt organic food products because it is farm fresh. Ninety four per cent of the consumers opting that the reason opting organic food products its health benefits while 90 percent going for it for its taste and is increased shelf life. Groeben (2012) also concluded taste preferences is one of the reasons for people choosing organic products. The other reasons expressed by the consumers were chemical free foods, more antioxidants and advice given by doctors, friends and media.
- Eighty percent of consumers expressed the health benefits of organic foods that it contributes more nutrients. Fifty four percent of the consumers felt that the production of organic food reduces soil erosion while 20 percent opined that it increases soil fertility.
- Ninety per cent of consumers were too knowledgeable that inorganic foods affect both human and the animal health, since it indulges in high doses of antibiotics and growth hormone. Fifty five per cent of the consumers opined that consumption of inorganic foods affects pregnant women.
- It is found that majority (50 per cent) of the consumers felt puberty in early years as a health hazard due to consumption of inorganic foods. The other responses were more pesticide residues, development delays, behavioural disorder, Motor dysfunction and fits as expressed by the consumers.
- Consumers faced constraint while purchasing the organic product. Of the constraint faced, high cost of the organic products was the major constraint

faced as expressed by 45 per cent of the consumers. Thirty five per cent of the consumers stressed that only limited products were available.

- Majority (30 per cent) of the consumers were aware that organic certification makes the organic foods more expensive followed by 23 per cent expressing that the reason for organic foods being more expensive is that they receive less or no government subsidies. The other reasons as expressed by the consumers were more labour intensive and Organic farm is smaller than conventional farm.
- Majority (45 per cent) of the consumers manage the expenditure on organic food through purchasing from the farmers market. The other ways of managing the cost as expressed by the consumers were to buy limited inorganic food products and Shopping around and buying seasonal food products and avoiding unnecessary expenditure on luxurious things.
- Forty per cent of the consumers felt subsidiary income as the economic benefit derived by producing organic fruits and vegetables while 30 per cent realized less expenditure on fruits and vegetables by growing them in their kitchen garden as the economic benefits.
- Fifty five per cent of the consumers have observed improved fitness as an result of consuming organic foods over years. Forty five per cent observed reduced digestion issues due to consumption of organic foods. The other changes observed beneficial to health as expressed by the consumers were reduced skin trouble, and improved alertness and activeness. Sense of satisfaction. The results showed the tremendous health benefits of organic foods
- A majority (30 per cent) of the consumers suggested raising kitchen garden and utilizing the kitchen waste as manure to minimize the risk of exposure to pesticide thereby promoting consumption of organic foods while 30 per cent felt that awareness campaign would promote consumption of organic foods among consumers. Change of attitudes towards organic products and government support to the farmers to encourage Organic farming were the other suggestions given by the consumers .

## **CONCLUSION**

The increasing consumer demand for higher quality produce and food safety makes organic food an interesting option. Variety of factors that can potentially influence organic food consumption such as concern for health, environmental protection, concern for the chemical residues such as pesticides as in conventional food products, nutritional concern, as well as improved taste and flavour in organic food products.

Organic produce should be affordable to the common man and the profits should be kept nominal so that it becomes available for more people. A change in attitude among the next generation is the only way forward. "Organic is an option that is healthy and tasty.

Following are the Recommendations emerged from the present study,

1. More research to fully explore the potential health and safety difference between organic and conventional food
2. Motivating consumers to go for Organic foods
3. Awareness Campaigns on health benefits of Organic foods and hazards of Inorganic foods
4. Government should financial support to the farmers to convert their land to Organic land.

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## APPENDIX I

### AVINASHILIGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN

COIMBATORE- 641 043

#### Questionnaire to elicit information seller's perception toward organic food products

Name of the Interviewer:

Name of the Interviewee:

Name of the shop :

Postal address :

Phone no :

E-Mail ID :

#### I. General socio economic details:-

1. Age:
2. Gender:
3. Income of the family (per month):
4. Education :
5. Occupation:
- II. Opinion regarding food product:-
6. State the reason for selling organic product?  
a) Service oriented b) Cost beneficial c) Own interest d) Family  
business
7. Where do you procure organic food products for your shop?  
a) Organic growers b) Organic product dealer c) Own agriculture  
d) Any other
8. What is the opening and closing timing of your shop?

- 
9. Organic product move (solid) rapidly

a) Very acceptable   b) Acceptable   c) Partly acceptable

10. State the consumer satisfaction for organic food product

a) Excellent   b) Good   c) Fair

11. Do you have enough space for the display of products?

a) Yes      b) No

If, Yes, how much space available

a) Less than 500 sq.ft   b) 500-1000 sq.ft   b) more than 1000 sq.ft

12. Do you have adequate provision for storing organic product?

a) Yes      b) No

13. Do you have any branch/franchise?

a) Yes      b) No

14. Do you sell any other organic product along with the organic food product?

a) Yes      b) No

If Yes, specify the products

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15. Time taken to procure organic food product from the source?

a) One day   b) One week   c) More than one week

16. Do you provide any counselling to consumer about organic products?

a) Yes      b) No

If Yes, whom do you counselling

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17. Do you provide any offer or discount to the products?

a) Yes      b) No

18. Do you provide any suggestion to the consumer about the organic products?

a) Yes      b) No

19. Do you face any problem/ setbacks in marketing organic product?

- a) Yes      b) No

If Yes, specify the reason below:

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20. Do you receive any type of funds for running your business?

- a) Yes      b) No

If Yes, specify:

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21. Do you conduct any programmes to bring awareness about the organic product and to motivate its buying?

- a) Yes      b) No

If Yes, specify the reason below:

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22. Do you have any link with service oriented associations?

- a) Yes      b) No

If Yes, specify the reason below:

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23. Do you exploit any media to advertise your organic food product?

- a) Yes      b) No

24. Do you need an extra amenity for developing your business?

- a) Yes      b) No

25. Monthly income (turn over) in shop

- a) Less than 10,000      b) 10,000-25,000      c) More than 25,000

26. Are you satisfied running this shop?

27. Who motivated you to start organic product shop?

Any other comment / Suggestion.

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## APPENDIX II

### AVINASHILIGAM INSTITUTE FOR HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN

COIMBATORE- 641 043

#### Questionnaire to elicit information perception toward organic food products

Name of the Interviewer:

Name of the Interviewee:

Postal address :

Phone no :

#### III. General socio economic details:-

8. Age:

9. Income of the family (per month):

10. Education :

11. Occupation:

12. Type of the family

a) Joint b) Neutral

13. Size of the family

a) Small b) Medium c) Large

**IV. Percent expenditure on organic food product :**

Name of the family members	Family monthly Income	Monthly expenditure on food product	Monthly expenditure on organic food product	Item purchased	Purchase only Organic foods Yes/No

**III. Opinion regarding organic food products**

7. Reason for opting organic food products.

- a) Healthy
- b) More Antioxidants
- c) Advice from doctors/Friends/Media/Advertisement
- d) Ill effects of inorganic foods

8. How long you are consuming organic food

9. Are satisfaction you solely dependent on organic foods

- a) Yes
- b) No

10. Changes observe after consuming organic foods over years

- a) Reduced digestion issues
- b) Reduced shin trouble
- c) Improved fitness
- d) sense of satisfaction
- e) Improved alertness and being active

**IV. Benefits of organic foods**

**i. Environment**

11. Organic foods are environmentally friendly because

- a) Reduces pollution (air, water, soil)      b) conserve water      c) Reduce soil  
d) increase soil fertility      e) Use less energy

**ii. Human Health**

12. Organic foods are devoid of chemical fertilizer insecticides, fungicides

- a) Yes      b) No

**V. Hazards of Inorganic foods**

13. Have you ever experienced food poisoning after consuming raw inorganic fruits and vegetables?

- a) Yes      b) No

14. Health consequences of Inorganic foods to child

- a) Development delays      b) Behavioural disorder      c) motor dysfunction  
d) fits      e) Puberty in early years

15. Inorganic foods affect pregnant women

- a) Yes      b) No

**VI. Animal health and welfare**

16. High doses of antibiotics, growth hormones of animal affect both human and animal health

- a) Yes      b) No

**VII. Shelf life of the products**

17. Organic foods have better shelf life compared to conventionally cultivated fruits and vegetables

- a) Yes      b) No

18. How long the organic vegetables stay fresh

- a) 1 or 2 days    b) 5 days    c) 7 days

#### **V. Economic benefits**

19. In what way, organic products derive economic benefits

- a) utilizes of available land    b) less expenditure on purchase of vegetable and fruits    c) Improve local economy    d) less expenditure on transportation to buy vegetable    e) subsidiary income.

20. How to manage the cost of organic food within your budget through,

- a) Shop    b) Forming a food co-operative    c) avoiding unnecessary expenditure an luxurious things    d) shops around    e) Buy seasonal food products

21. Why is organic food often more expensive

- a) More labour intensive    b). Organic certification    c) Organic feed for animal    cost twice as much    d) Organic farms are smaller than conventional farms    e). Organic farm receive low or no government subsidies.

22. Frequently purchasing the organic food product

- a) Every day    b) Once in two days    c) once in a week

23. Do you have any constraint purchasing the organic product

- a) Yes    b) No

If yes, specify the reason below:

- a) Money    b) Taste    c) Not available easily    d) spoils easily

24. Do you check label of the product for its nutritional and other information

- a) Yes    b) No

If yes, what are the aspects you look for

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25. Do you prefer to buy branded organic products

- a) Yes      b) No

26. Have you ever been cheated while purchasing organic food product

- a) Yes      b) No

If yes, specify the reason below:

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27. Have you ever attempted to compare the shelf life between organic and inorganic food product

- a) Yes      b) No

28. Are you willing to motivate others to go for Organic products.

- a) Yes      b) No

Suggestion if any,

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