Chapter - IV

ECO – AGRI – RURAL TOURISM IN FOREIGN COUNTRIES
4.1 ECO–AGRI–RURAL TOURISM IN AUSTRALIA

Australia is a major agricultural producer and exporter. There is a mix of irrigation and dry-land farming.

There are 3 main zones: high rainfall zone (generally coastal) (used for dairying, prime lamb, beef and wool production), wheat sheep zone (cropping (principally winter crops), and the grazing of sheep (for wool, lamb and mutton) and beef cattle) and the pastoral zone (characterized by low rainfall, less fertile soils, and large area farming activities involving the grazing of beef cattle and sheep for wool and mutton).

Major agricultural products

Australia produces a large variety of primary products for both export and domestic consumption.

Crop

Cereals, oilseeds and grain legumes are produced on a large scale in Australia for human consumption and livestock feed. Wheat is the cereal with the greatest production in terms of area and value to the Australian economy. Sugarcane, grown in tropical Australia, is also an important crop.
Horticulture

Australia produces a wide variety of fruit, nuts and vegetables. The largest crops (>300 kilo tones, in 2001-2001) include oranges, apples, bananas, chestnuts potatoes, carrots and tomatoes.

Tropical fruits, including bananas, mangoes and pineapples, fare well in Queensland and the Northern Territory.

Australia is one of the few countries that produces licit opium for pharmaceuticals. This industry, centered in Tasmania, is subject to strict controls.

The horticulture industry has traditionally provided Australians with all their fresh fruit and vegetables needs, with a smaller export industry.

Viticulture

Australia has a large wine industry, and the value of wine exports surpassed AUD$2.3 billion in 2002-2003. Wine regions include the Barossa Valley in South Australia, Sunraysia in Victoria and the Hunter Valley in New South Wales. The key wine varieties grown in Australia (by area in 2001-2002) are Chardonnay, Shiraz and Cabernet sauvignon. Although the Australian wine industry enjoyed a large period of growth during the 1990s, over planting and over supply have led to a large drop in the value of wine, forcing some wine makers, especially those on contracts to large wine
producing companies, out of business. The future for some Australian wine producers is now uncertain.

Livestock

The number of livestock killed for domestic consumption or export, or exported live in 2001-2002.

The Beef Industry

The beef industry is the biggest agricultural enterprise in Australia. The Australian beef industry is dependent on export markets, with over 60% of Australian beef production exported, primarily to the United States and Japan.

The Lamb Meat Industry

Lamb has become an increasingly important product as the sheep industry has moved its focus from wool production to the production of prime lamb. The beef meat industry and the lamb industry are represented by Meat and Livestock Australia. Live export of cattle and sheep from Australia to Asia and the Middle East is a large part of Australian meat export.

The Pork Industry

There are currently an estimated 2,000 pig producers in Australia, producing 5 million pigs annually (Productivity Commission).
Dairy

Dairy products are Australia's fourth most valuable agricultural export.

Domestic milk markets were heavily regulated until the 1980s, particularly for milk used for domestic fresh milk sales. This protected smaller producers in the northern states who produced exclusively for their local markets.

Fisheries

The gross value of production of Australia's fisheries and aquaculture products was $2.3 billion in 2002-03. The Australian aquaculture industry's share of this value has been steadily rising and now represents around 32 per cent. The value of exports of fisheries products in 2002-03 was $1.84 billion. Australia's main seafood export earners include rock lobsters, prawns, tuna and abalone.

Wool

Wool is still quite an important product of Australian agriculture. The Australian wool industry is widely recognized as producing the finest quality Merino wool. This is largely attributable to selective breeding and a superior genetic line.
Cotton

Australia also produces considerable amounts of cotton. The majority of the cotton produced is genetically modified to be resistant to the herbicide Roundup or to actively kill pests through the production of Bt toxin (Bt-cotton). Cotton is generally grown by irrigation.

4.2 AGRI TOURISM AS A COMPANION INDUSTRY IN AUSTRALIA

Tourism has been seen as a panacea for expanding local economies. It has been observed to be a good companion industry if properly managed but the importance of maintaining farm activity as a core business is essential from both the agricultural and tourism industry viewpoints. Tourism activity can stimulate international interest in farm product and like traditional co-operative approaches within agriculture to distributing and marketing farm products, needs strong mutual support from other regional businesses. Many Australian rural communities had Rural Co-operatives and the farm based tourism activity also requires a hub, most often in the form of a tourist center, but at least some mechanism for coordinating and linking regional tourism experiences.

Tourism’s contribution to Australia’s economy is around 4.5%. About a third of this are expenditures on restaurant meals, accommodation, retail and clubs, all of which are a part of the rural tourism economy. Tourism’s capacity to generate economic effects in
a large number of sectors within the economy means that it has been seen as a potential panacea for rural downturns

It has been observed that the perceived growth of farm tourism in Australia had more to do with the number of farms entering the tourism market than any real demand by tourists. Farmer’s expectations about tourism are that it will only provide supplementary income 3.5% or be a hobby / interest for a member of the family 34%. Only 22% expect that the business will be viable in its own right but operators would stay in tourism even if the general rural outlook improved appreciably especially because of the consistency of farm-stay incomes and the benefits gained for the time spent.

European experience indicates that high investments are needed for tourism on the farm and that profitability hinges on the adoption and mastery of a new profession by the farming family. Women assume the bulk of tourism responsibilities. Farm tourism started in Australia during the 1970’s and Hall (1997), quoting Frater (1983 : 168) contends that it may well be largely maintained by the determination and interest of “the farmer’s wife”.

In Australia a recent survey of establishment costs showed that farm tourism businesses spent an average of $30,000 with 50% of businesses having spent between $1,000 and $10,000.

One of the most common features of rural tourism that is offered to farmers as an incentive to consider starting a tourism business is its ability to generate an alternative income stream. This
income can come at times that supplements income during seasonal fluctuations but farmers are looking for alternative income that does not impact or interfere with their ‘real’ business.

A survey of Victorian farm tourism showed that 78% of the farmers started tourism ventures for extra income. Half of the farms made less than 15% of their income from their tourism activities, but that the overall average for farms that had tourism as a companion industry was 22%. In a similar study, 14% of farming businesses in the NW region of the Sydney basin were involved in tourism, 72% of these were making less that 10% of their income from tourism. Up to 28% of the farms had at some stage experimented with tourism, half having withdrawn from the industry because of excessive additional work, no profit, too many conditions, or inadequate financial assistance.

In Australia around 50% of farm tourism businesses grossed less than $5,000 and only 16% grossed over $40,000 but this income did help to smooth out the normal troughs and peaks in farm income. The actual level of income in not as important as the fact that they have an alternative source of income. Factors affecting income were rooms capacity, visitor numbers and price. About a third of farmers perceived that their standard of living had not improved since starting a tourism business and half said it did not decrease the necessity to take off farm employment.
Table 4.1 Income from Farm – Stay Operations 1995

<table>
<thead>
<tr>
<th>Gross Profit</th>
<th>Percent of Farm-Stay Operators</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $5,000</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>$5,000 but less than $19,999</td>
<td>19</td>
<td>67</td>
</tr>
<tr>
<td>$20,000 but less than $39,999</td>
<td>17</td>
<td>84</td>
</tr>
<tr>
<td>More than $40,000</td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.2 Earnings from Tourism in Percent of Total Net Income by Type of Accommodation.

<table>
<thead>
<tr>
<th>Income</th>
<th>Farm (N 96)</th>
<th>Rural (N 76)</th>
<th>Hotel (N 28)</th>
<th>Total (N 200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10 %</td>
<td>53.1</td>
<td>48.7</td>
<td>--</td>
<td>44.0</td>
</tr>
<tr>
<td>11-20 %</td>
<td>25.0</td>
<td>19.7</td>
<td>--</td>
<td>19.5</td>
</tr>
<tr>
<td>21-30 %</td>
<td>14.6</td>
<td>15.8</td>
<td>14.3</td>
<td>15.0</td>
</tr>
<tr>
<td>31-50 %</td>
<td>4.2</td>
<td>10.5</td>
<td>10.7</td>
<td>7.5</td>
</tr>
<tr>
<td>51-70 %</td>
<td>1.0</td>
<td>2.6</td>
<td>7.1</td>
<td>2.5</td>
</tr>
<tr>
<td>71-100 %</td>
<td>2.1</td>
<td>2.6</td>
<td>67.9</td>
<td>11.5</td>
</tr>
<tr>
<td>Average %</td>
<td>16.6</td>
<td>20.3</td>
<td>78.6</td>
<td>26.7</td>
</tr>
</tbody>
</table>

In Hawaii plant production and processing tours generated the majority of their revenues from sales of goods at retail outlets at the attraction. Sports activities generated the highest revenue per visitor, whilst plant production tours generated the least.

As previously stated, low revenues from farm tourism are a result of low room numbers and so many farm tourism activities have difficulty securing sufficient tourist numbers to be financially self-sufficient. Where direct sales of food and beverages are part of the
farm business there is a much improved ability to increase profit margins.

Studies have shown that tourism can also be a useful tool for increasing farm gate sales. In the Howkesbury region of Australia a farm gate trail is operating as a means of gaining direct sales of farm produce. Some operators make as much or more from the sales to tourists and others seeking fresh produce as they do from sales via the normal retail distribution channels, which are dominated by the large food chains.

Carlson and Getz note two important consequences of a naïve entry into the tourism industry for rural businesses. The demands of running a tourism business often eats into the time previously available for family, leisure and recreation. Where tourism is seen as a chance to adopt a retirement lifestyle whilst maintaining a business, the realities of tourism and hospitality frequently mean the opposite occurs.

**Rural Tourism Creates Employment**

A constant theme within the literature, especially that generated by government agencies, is the potential for tourism to create employment within rural communities, particularly labour intensive services and new product development. The Australian Tourism National Action Plan seeks to enhance the capacity of tourism to create jobs in regional Australia. However, academic researchers point out that it can only do so if the share of the tourism market is
increasing. Rural tourism areas are reliant on stimulating demand both domestically and internationally.

The employment theme is extended to include specific opportunities for young people within rural communities in the hope that tourism may provide an incentive for them to remain. The tourism industry is often promoted as an exciting and growing industry suited to the energies and enthusiasm of young people. Career options are enhanced with the opportunities for training and direct involvement in running tourism businesses, especially those within small communities.

**Opportunities for Diversification**

Rural communities have been forced to try many different agricultural activities to try and survive the problems of rural downturn, drought and diminishing returns at the farm gate for their produce. Tourism is promoted as one way of diversifying their economic base via the alternative “crop” that tourism can represent to rural communities. For example the structural changes brought about by development of the European Common Market has meant of discipline, of exploration but always of heightened self awareness. The rural tourism experience is well positioned to satisfy these needs, especially if it involves exploring cultural roots.
Belief that rural areas represent slower paced, simpler lifestyle

Nostalgia for traditional cultures and ways of life

Wish to learn more about the area’s past and present life

Express desire to temporarily become part of the local community

Prefer not to mix with other tourists

(Figure 4.1) Rural tourist Psychographics
A survey of farm tourism in Victoria identified two other aspects that differentiated rural tourists from one another.

- Domestic tourists who preferred cottage accommodation and
- International tourists who preferred to stay in the homestead with the farm family.

The vast majority of guests for Australian farm stay operators were domestic visitors on short breaks of 2-3 days (60%). The small number of international visitors stayed for 2-2 days (86%).

**International Tourists**

In 1994 (34%) of inbound tourists ventured into regional Australia but only visited three regions, even though with an average length of stay of 23 days, they had ample time to visit many more. Europeans and North Americans are most likely to travel to regional Australia, whereas Asian visitors are not.

**Table 4.3 Tourist Visitation in NSW**

<table>
<thead>
<tr>
<th>Region</th>
<th>International</th>
<th>Domestic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sydney</td>
<td>77 %</td>
<td>24.6 %</td>
</tr>
<tr>
<td>North Coast</td>
<td>8 %</td>
<td>13.9 %</td>
</tr>
<tr>
<td>South East / Illawarra</td>
<td>4 %</td>
<td>20 %</td>
</tr>
<tr>
<td>Hunter/Central Coast</td>
<td>3 %</td>
<td>15.3 %</td>
</tr>
<tr>
<td>Murray / Riverina</td>
<td>2 %</td>
<td>8.1 %</td>
</tr>
<tr>
<td>Blue Mountains / Hawkesbury</td>
<td>2 %</td>
<td>3.5 %</td>
</tr>
<tr>
<td>Fr West / Orana</td>
<td>1.3 %</td>
<td>4.6 %</td>
</tr>
<tr>
<td>New England</td>
<td>1 %</td>
<td>5.3 %</td>
</tr>
<tr>
<td>Central West</td>
<td>0.7 %</td>
<td>4.7 %</td>
</tr>
</tbody>
</table>
The Australian Tourist Commission profiles Australia’s major markets and identified segments within each of the 5 major markets that have a desire to experience various aspects of the Australian experience. The ATC calculates the potential market size as a proportion of total population for each country of origin. About 18% of North Americans who are willing and able to make the trip to Australia will be interested in a rural tourism experience. The following table details other countries of origin.

**Table 4.4 : Countries of origin**

<table>
<thead>
<tr>
<th>Region of Origin</th>
<th>Percent of Potential Market (Range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>18</td>
</tr>
<tr>
<td>Asia</td>
<td>2 % - 7 %</td>
</tr>
<tr>
<td>Europe</td>
<td>6 % - 14 %</td>
</tr>
<tr>
<td>Japan</td>
<td>7 %</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Nil</td>
</tr>
</tbody>
</table>

For example, rural tourism in the Hawkesbury region just outside Sydney amounts to 140 day tour packages per annum, groups ranging from 3-150 persons, including importers and consumers of Australian produce, mostly from Asia, the bulk Japan, but also North America and Europe.

International backpackers also represent a market segment of potential value to rural tourism. Using 1995 data, BTR examined the profile of visitation and spending characteristics and found that backpackers account for about 20% of all visitor nights and about 13% of direct visitor expenditure. Sydney region ranks as the most
frequently visited in Australia (nearly 2/3 of inbound tourists include Sydney in their itinerary), primarily due to its role as the premier entry point to Australia.

**Domestic Tourists**

In 1992 the Bureau of Tourism Research (BTR) profiled Australian domestic travelers and found that around 1% of travelers surveyed stayed on farms and there was no discernable differences based on age, sex or socio-economic grouping.

Similar data generated by the Tourism Commission of NSW in 1994 calculated that 2.6% of domestic travelers in NSW stayed on farms. The equivalent figure for the Sydney Region which includes the Blue Mountains was 0.1%.

New South Wales Tourism Commission found in their 1993 domestic market study that NSW had a clear profile in terms of accessible diversity in holiday offerings. This has implications for rural areas, especially those close to Sydney in terms of potential product development. About 45% of all holiday types taken within NSW involved tourism in rural areas. The key segments of the market with an interest in rural tourism are young families (looking for the comforts of home but the chance to relieve stress and occupy the children) and older couples (looking for unpressured touring). Both segments have a propensity to take longer holidays (4 nights or more in paid accommodation).
For example, domestic tourists to the Illawarra are mostly from Sydney, came for a holiday, traveled by private car and stayed less than 3 nights.

The following table summarizes the most recent data about visitation to rural Australia. Compared to the situation in 1994, it appears that there has been a rope off in visitation by international visitors to rural areas, but the estimates suggest that domestic visitation has increased. Given the influence of domestic tourism, this is a good sign. The table shows clearly the relative growth rates and effect of growth till 2008. The significance of the domestic market far outweighs that of the international, but one can understand the interest in internationals because of the yield and potential growth rates.

Table 4.5 : Yield and Potential growth rates of rural Australia

<table>
<thead>
<tr>
<th>Rural Visits (1 Night)</th>
<th>Inbound (28% of Total)</th>
<th>Domestic (68% of Total)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number (000's) (1995-96)</td>
<td>1010 (2.3%)</td>
<td>43,000 (97.7%)</td>
<td>44,000</td>
</tr>
<tr>
<td>Value ($ Million) (1998)</td>
<td>$1100 (12%)</td>
<td>$7800 (88%)</td>
<td>$8900</td>
</tr>
<tr>
<td>Spending per Visit (est)</td>
<td>$1100</td>
<td>$181</td>
<td>$202</td>
</tr>
<tr>
<td>Average Growth Rate to 2008</td>
<td>7.3%</td>
<td>1.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Net Increase to 2008 (10 Years)</td>
<td>2020 (+202%)</td>
<td>49400 (+15%)</td>
<td>51420 (+17%)</td>
</tr>
</tbody>
</table>

Overall 28% of all inbound tourists spend at least 1 night in a rural or regional area. 68% of all domestic trips include a stay in rural or regional Australia. The net growth is estimated at around 1.6% over
the 10 years to 2008. Which is fractionally above the domestic population growth rate, or from an industry growth viewpoint.


1) Tourism is now one of Australia’s most important foreign exchange earners. It is the 4th single industry earner contributing over US$ eight billion to the economy.

2) It is one of our fastest growing industries and has come from fairly humble beginnings. In 1984 Australia hosted just over 1 million international visitors in 2000 that figure had grown to 4.9 million. The destination has been averaging double digit growth, most years except for the Asian financial crises period of late 90’s.

3) In actual fact, domestic tourism is approximately 75% of all tourism in Australia. This trend is replicated around the world in most countries. My advice to any destination embarking upon tourism promotion is neglecting this segment at your own risk.

4) When we look closely at agri-tourism we find the breakdown is as follows; Agri Attraction 40%, Farm stays 30%, Agri day / extended tours 20%, Agri Conference / seminars 10%.
5) The largest property can accommodate 600 guests whilst smallest just 2.

6) What constitutes agri attractions?

7) Generally with farm stays, the hosts have to have as a prerequisite that they must enjoy the company of people.

8) One reason why visitors like to stay with hosts on their properties is that they have access to host’s knowledge of local area.

9) It is often effective if a group of farms work together to develop farm stays. A critical mass helps with hosting larger groups e.g. Arrive central point / hosts collect / dispersal.

10) Australian Auto Association reviews current star rating to provide standardization across the country.

11) Research is critical for success. It is not just a matter of putting up the sign, printing the brochure and expecting tourists will come.

12) We move to another facet of agri tourism and that is the special interest / study tours and / or conferences / seminars. Technical visits for specific industry groups are an increasing segment. They may include technical seminars, demonstrations, field trials and field days. It can also include a visit to an agri show.

13) It is quite effective also to bring user and producer together.
14) Pre / Post conference tours are another target market for regional centers and businesses.

15) Also there are increasing links between agri tourism and nature based or eco tourism. Farms / regional centers offer outstanding scenery, national parks, nature reviews, wildlife, nature flowers as well as heritage buildings / landscape. Sustainable habitat management is of increasing interest to a highly urbanized population.

16) Local communities can also get involved by using local groups for meal hosting, guiding and organization assistance e.g. to American family based group, local church catered for lunch, local yard sales, weekly bazar make ready built attraction.

17) More and more farmers are using on line to improve built attraction.

18) What else has Australia agri tourism done? – Farmed local / national associations, Dedicated tour operators who market nationwide e.g. Australia Farm hosts / Farm stays.

Effectively worked with Government to standardize regulations across Australia.

Effectively working with recognized ratings system e.g. Australian Auto Association to rate properties so that the customer knows what he / she is purchasing.
19) In conclusions, Once you have decided that the agri tourism is for you and you are ready to invest in the same, the first step should be research. Here you have to ensure that the customers are going to come so that your business will be viable.

20) Yes, many of those in the industry declare that marketing is the hardest part of the business to get right. I wish to all well in your pursuit of agri tourism and would be happy to answer any questions.

4.4 ECO AGRI RURAL TOURISM IN ISRAEL

Agriculture is a major industry in Israel with the country being a net exporter of food as well as a world-leader in agricultural technologies. Israel does not have a geography which makes it appear instantly to be best suited to agriculture. Not only is more than half of the land area desert, but also the climate and water resources do not make agriculture an instantly attractive industry. Just 20% of the land area is naturally arable.[1] Today agriculture represents 2.5% of total GDP and 3.6% of exports.[2] Agricultural workers make up about 3.7% of those employed and Israel produces 95% of its own food requirements.
History

Some of the earliest records of agriculture were in the land which now makes up Israel, making use of water resources which were and remain to this day, scarce. Modern agriculture developed in the late nineteenth century, when Jews began returning to the land. They purchased land which was mostly semi-arid, although much had been rendered untellable by deforestation, soil erosion and neglect. They set about clearing rocky fields, constructing terraces, draining swampland, reforesting, counteracting soil erosion, and washing salty land. Since independence in 1948, the total area under cultivation has increased from 408,000 acres (165,000 ha.) to 1.07 million acres (435,000 ha.), whilst the number of agricultural communities has increased from 400 to 725. Agricultural production has expanded 16 times, three times more than population growth.

In 2006, agricultural output in Israel fell by 0.6% following a 3.6% rise in 2005, whilst inputs for this year rose by 1.2% excluding wages. Between 2004 and 2006, vegetables consistently saw the greatest outputs, accounting for around 35% of total agricultural output. Flowers made up around 20%, field crops made up around 18%, fruits (other than citrus), around 15%, and citrus fruits around 10%. In 2006, 36.7% of agricultural output was for domestic consumption, 33.9% for domestic manufacturing, and 22% for direct export. In 2006, 33% of vegetables, 27% of flowers, 16% of field crops, 15.5% of fruits other than citrus, and 9% of citrus fruits were exported.
Farm Types

Most of Israel's agriculture is based around co-operative principles, which evolved during the start of the twentieth century. Two unique forms of agricultural settlements; the kibbutz, a collective community in which the means of production are communally owned and each member's work benefits all; and the moshav, a farming village where each family maintains its own household and works its own land, while purchasing and marketing are conducted co-operatively. Both communities provided a means not only to realize the dream of the pioneers to have rural communities based on social equality, co-operation and mutual aid but also to gain agricultural output in a productive means.\[^2\] Today, between kibbutzim and moshavim, 76% of the country's fresh produce is output, as well as many processed food products.

Crop

Due to the diversity of the land and climate across the country, Israel is able to grow a wide range of crops. Field crops grown in the country include wheat, sorghum and corn. On 215,000 hectares of land, these sorts of crops are grown, 156,000 hectares of which are winter crops. Fruit and vegetables grown include citrus, avocados, kiwis, guavas and mangoes from orchards located on the Mediterranean coastal plain. Tomatoes, cucumbers, peppers and zucchini are grown commonly throughout the country, whilst melons are grown during winters months in the valleys. Subtropical areas in
the country produce bananas and dates, whilst in the northern hills apples, pears and cherries are grown. Furthermore, grape vineyards are found across the country, as the country's wine industry has developed to become a world-player. In 1997, $107 million worth of cotton was grown in Israel with most of this sold in advance on the futures market. The crop is grown on 28,570 hectares of land, all of which is drip irrigated. 5.5 tons per hectare of raw cotton is averaged for the Acala crop whilst the Pima crop averages 5 tons per hectare, which are yields amongst the highest in the world.

**Flowers**

Mostly exported, Israel produces vast quantities of flowers, and is placed amongst the world's largest flower-growing countries. Flower exports in 2000 exceeded $50 million. The flowers grown most commonly are wax flowers, followed by roses, which are grown on 214 hectares of land.

**Meat Produce**

The Mediterranean Sea sees salt-water fishing whilst freshwater fishing occurs on Lake Kinneret (the Sea of Galilee). Pioneering technology being developed in the Negev desert in the south are seeing fish grown in kibbutzes and artificial lakes. In terms of poultry which makes up two thirds of meat consumption, 85% originate from moshavim. All of the Israel's milk consumption originates from dairy farms within the country with most herds consisting largely of Israel-
Holsteins, a high-yielding, disease-resistant breed. Furthermore, sheep milk is exported.

**Agricultural Technology**

Israel is a world leader in agricultural Research and Development which have led to dramatic increases in the quantity and quality of the country's crops. The drive to increase yields and crop quality has led to the development of new seed and plant varieties, as well as to innovations such as a soil-enhancing substance (vermiculite) which, when mixed with local soils, boosts crop yields, and drip irrigation.

**Government**

Farm surpluses have been almost eradicated in the country with farms having production and water quotas for each crop which have stabilized prices. Production quotas apply to milk, eggs, poultry and potatoes. Government also encourage a reduction in agricultural costs trying to encourage specialized farming, and halting of production of crops for which no sufficiently profitable markets exist. The Ministry of Agriculture oversees the country's agricultural sector, including maintenance of standards of plant and animal health, agricultural planning, and research and marketing.
4.5 ECO - AGRI – RURAL TOURISM IN SINGAPORE

1) Geography: Singapore is a small heavily urbanized, island city state in south east Asia located at the southern tip of the Malayan Peninsula between Malaysia and Indonesia.

Singapore’s main territory is a diamond shaped island, although her territory includes surrounding smaller islands. Most of Singapore is no more than 15 meters above sea level.

Singapore has no natural lakes, but reservoirs and water catchments areas have been constructed to store fresh water for Singapore’s water supply.

2) Climate: Singapore’s climate is characterized by uniform temperature and pressure high humidity and abundant rainfall.

3) Agriculture Industry: The agriculture industry can be found to some extent but it is not of great importance to the economy of Singapore. Singapore does produce its own poultry, fishery and farming, eggs and grows various fruits and vegetables, cereals but it mostly import most other food.

Moreover Singapore is a land city state, agriculture land is not available because it is made up of several islands. In spite of non availability of land, Singapore government has successfully implemented the concept of Agri Tourism.
The tourists are shown glass houses, green houses, poly houses. Floriculture is a major export industry in Singapore. Flowers like Orchid are exported to various countries like Japan.

Agricultural activities like fishery farming, the colourful marine and aquatic life, colourful species of fish and other marine species, waterfalls, dams, fruits, meat, fish, vegetables and other agriculture based bio-products and preservative practices are also shown as a agri tourism sites and destinations.

The agricultural sector of Singapore is engaged mainly in the production of eggs, fish and vegetables for local consumption and orchids and ornamental fish foe exports. About one percent of Singapore’s land area is used for agricultural purposes.

4) **Horticulture**: The main crops cultivated are vegetables and orchids. Intensive and modern farming methods are adopted to maximize vegetable production, vegetables produced include bayam, cai xin, kai lan, bai cai and xiao bai cai. Bean sprouts are also produced.

A number of farms and nurseries grow orchids, ornamental and foliage plants for export and domestic sale. Singapore is renowned for her orchid cut flowers which are exported to many countries. The orchid and other horticultural enterprises are supported by plant tissue laboratories which produce several hundred thousand of plantlets.
5) **Fisheries**: Local fish production comprises mainly aquaculture produces from fish farms with small quantities from local capture fisheries. Singapore also imports, exports and transships fish caught by foreign vessels.

There are 105 floating fish farms covering 85 lactares of coastal waters culturing high valued fish like groupers and seabass for the live fish market and supermarkets.

**Infrastructure and Superstructure Development in Rural Singapore**

Facilities and services available for farm – rural tourism in Singapore are far more developed. Infrastructure development in Singapore has been the main focus and thrust in their initial stages of development. For any country to progress at a fast forward it is important that the basic infrastructure like energy and water supply is ample and sufficient.

Following on these strong supply system than other infrastructure like roads, bridges over seas and rivers, railways, air services are well built.

This can facilitate movement of people from one place to another. All these infrastructural facilities will encourage quicker, convenient movement. In Singapore developed modes of transportation are available which are also met subject to cost,
comfort and speed. All transportation services are adequate and economical.

Singapore is well connected by air services. All the major International airlines have their services to Singapore including the National Carrier, Singapore Airlines.

Even the interiors of rural areas are connected with proper signage pathways and other tourist facilities. All the well developed transport facilities in Singapore encourage quicker convenient movement in the rural areas and interiors.

All types of modern accommodation facilities are available in Singapore ranging from star deluxe category to budget category, unique water based accommodation like houseboat accommodation or countryside accommodation is available for the tourists. Local farm owners, rural and farm entrepreneurs also provide comfortable and luxurious accommodation with all the food and entertainment activities to the tourists.

Ample supply of constant electricity is available in Singapore. Electricity is also important for mechanized farming and modern agricultural practices as well as for agri tourism. Hence farmers are able to produce indigenous agricultural products and earn profit. In Singapore because of plenty of water availability, hydro energy is also produced. Water supply in Singapore is ample and sufficient. Because of plenty of water supply, agricultural practices such as fishery
farming, floriculture, aquaculture are being implemented. Singapore is a world leader in export of floriculture.

Singapore also has proper garbage disposal system. All the plastic waste generated by is taken care by the local authorities, improvement in garbage disposal system has fostered conducive atmosphere for tourists, pollution level is controlled in Singapore.

Singapore has also shown their priority towards sanitation and personal hygiene. It has taken various measures like camps, demonstrations, workshops on cleanliness which are regularly organized. Local community also participates in this.

Singapore has ample number of public toilets which are necessary to maintain cleanliness. There are separate toilets for men and women which have been created strategically in places where there are maximum congregation of tourists.

Interiors of Singapore, villages are accessible each during the evenings as number of light posts are erected at strategic tourist locations. This has facilitated the free movement of the tourists even during the nights. In Singapore all new and modern means of communication like telephones, STD, PCO, Internet has facilitated tremendous development.

In Singapore proper signages, direction boards are created at tourist places. There are location maps which show points of Touristic value. There are signpost, indicating direction of the sites. There are
also information boards. Because of directions and signage’s tourists are able to commute smoothly to the point of interest since there are marked.

Singapore government also set an example in environmental awareness by implementing programmes or projects. It also ensures that environmental awareness is moral responsibility of tourists as well as host community. Lots of environmental awareness, conservation campaigns, camps, demonstrations are organized. There is involvement and participation of local community in environmental awareness.

Since last one decade rural tourism also started in India but limited only in a few states like Kerala, Punjab later also began in Maharashtra.
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