

# KARSHAKA PROJECT

“Cultivation Of Medicinal Plants In Attappady For The  
Sustainable Livelihood Of Tribal People”



HRDS INDIA

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(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)

DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD, KERALA, INDIA - 678007

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“Cultivation Of Medicinal Plants In Attappady For The Sustainable Livelihood Of Tribal People”

## Components of the project

1. Cultivation of Medicinal Plants in 5000 Acres of Land
2. Establishment of National Research Centre for Medicinal Plants and Environment (NRCME)
3. Establishment of Spices and Raw Medicine Extraction Unit



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Submitted by



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## ORGANIZATION PROFILE



HRDS INDIA

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DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD, KERALA, INDIA – 678 007

## ORGANIZATION PROFILE

<b>Implementing Organisation</b>	<b>HRDS INDIA</b> (The Highrange Rural Development Society)
<b>Address for Correspondence</b>	<b>HRDS INDIA, Door No: XIV/273,</b> <b>Near Post Office, Chandranagar, Palakkad-District,</b> <b>Kerala, India - 678007.</b> <a href="http://www.hrdsindia.org">www.hrdsindia.org</a>
<b>Legal Status of Implementing Organisation</b>	<ul style="list-style-type: none"> <li>• Registered under TCLS&amp;CSR Act 1955</li> <li>• Registration act 1955, No: I -170/97 Dated on 13/08/1997.</li> <li>• 12AA of IT Act CIT/CHN/12A/Tech75/2001-02 Dated on: 14/01/2004.</li> <li>• 80G (5) VI of Act CIT/CHN/12A/Tech75/2001-02 Dated on: 30/05/2002.</li> <li>• FCRA NO: 052940065 Dated on 15/05/2002.</li> </ul>
<b>Name of Principal Investigator</b>	<b>Ms. Leena K.T,</b> <b>Additional Director of Agriculture (Retd.),</b> <b>Govt. Of Kerala</b> <b>Project Director.</b> <b>HRDS INDIA</b>
<b>Chief Functionary</b>	<b>AJI KRISHNAN</b> <b>Founder-Secretary,</b> <b>HRDS INDIA</b> <b>Phone No: +919447025474, +919446488457</b>
<b>Target Area</b>	<b>Attappady, Palakkad, Kerala</b>
<b>Target Group</b>	<b>Tribal People</b>
<b>Project Duration</b>	<b>Continueing</b>
<b>Total Budget of the Project</b>	<b>Rs.270,00,00,000/-</b>
<b>Bank Details</b>	<b>SBI (State Bank of India)</b> <b>Marutharode Branch, Chandranagar.P.O.,</b> <b>Palakkad-678007, Kerala, India.</b> <b>Current Account : 37253354403</b> <b>IFSC Code : SBIN0016079</b> <b>Swift Code : SBININBB397</b>

# KARSHAKA PROJECT

“Project Proposal On Cultivation Of Medicinal Plants In  
Attappady For The Sustainable Livelihood  
Of Tribal People”



## FOREWORD



HRDS INDIA

**HRDS INDIA**

(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)  
DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD DIST, KERALA, INDIA – 678 007



**Dr. S. Krishnakumar IAS (Retd)**  
(Former Union Minister Govt of India),  
President  
HRDS INDIA

## FOREWORD

HRDS INDIA (The Highrange Rural Development Society) is dedicated to the development and up gradation of Tribes through various grassroots actions. We look forward to upgrade the living status of Tribal Community in all aspects. Since poor and marginalized people lack the resources needed to reduce the negative effects of the society which will hit the most vulnerable groups of society the hardest. In this light, HRDS INDIA has compiled a project proposal named “**Karshaka Project**” for the cultivation of medicinal plants in Attappady, Palakkad, Kerala, Establishment of National Research Centre for Medicinal Plants and Environment (NRCME), and the Establishment of Spices and Raw Medicine Extraction Unit for sustainable livelihood and the development of Tribal people. The project will have a two-sided effect: it will ensure financial security for the poor tribal people and in other sense retain the environmental sustainability of Attappady Tribal area.

**Dr. S. Krishnakumar IAS (Retd)**  
(Former Union Minister),  
President  
HRDS INDIA

# KARSHAKA PROJECT

“Project Proposal On Cultivation Of Medicinal Plants  
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## REQUEST LETTER



HRDS INDIA

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(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)  
DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD, KERALA, INDIA – 678 007





**Respected Sir,**

**Sub: "Karshaka Project" for the cultivation of medicinal plants in Attappady for the sustainable livelihood of Tribal people**

**HRDS INDIA (The Highrange Rural Development Society)** is a registered NGO, working for the development of Rural and Tribal people all over in India. Our President is Former Union Minister **Dr.S. Krishnakumar IAS (Retd.)**. HRDS INDIA, a team dedicated to pursue wider social aims is formed in the year 1997, granted by Certificates U/S 12 AA and 80G (5) & (VI) of the IT Act. We are registered under FCRA and NITI Aayog (Unique Id of NGO: KL/2016/0109581) as well, which is fairly eligible for receiving CSR Fund. Ever since its inception, HRDS INDIA has been involved and committed in contemporary social activities and played a crucial role in providing basic amenities to the disadvantaged sections in inaccessible areas of the country. We render services to all irrespective of caste, creed, religion or political background and help them build self-reliance.

We exclusively endeavour to address all aspects of Tribal and Rural Development throughout India, keeping Kerala, Tamil Nadu, Gujarat, Tripura, Assam and Jharkhand in the central domain. By effectively implementing initiatives to aid these segregated Tribal community self-subsistent and economically sound, HRDS INDIA has put forward various integrated approaches for rehabilitation of the marginalized masses of the society. We aspire to bring about a social change through awareness as well as forming local level organization to ensure social justice and equality. We aim to bridge the gap between the poor and rich by directing our efforts to build an equitable economic condition for the poor community. This further stiffens the participatory character of the backward and neglected communities by organizing them into better social collectives.

Our projects are "Sadhgraha" (Tribal Housing Project), "Jwalamukhi" Women Empowerment Programme (Micro Credit initiative for SHG's), "Ekagrah" Educational Programme (Educational, Cultural & Skill Development Programme DDU-GKY Govt. of India), "Niramaya" Centre for Traditional Medicine and Research (Health, Ayurveda, Naturopathy, Sidha and Yoga), "Karshaka" Cultivation of Medicinal Plants for the Sustainable Livelihood of Tribal People (Sustainable Sericulture, Cultivation of Medicinal Plants, Organic Natural Farming, Animal Husbandry, and Agriculture Development). Such projects foster community motivation and social mobilization.

## The Highrange Rural Development Society

Reg. No. I 170/97 (TCLS & CSR Act 1955) FCRA No. 052940065/02,  
80(G)5(vi) No. CIT/CHN/12A/Tech-75/2001-02, PAN No. AAJHO 168A

Regd. Office: Kattapana 685 515, Idukki Dist, Kerala, India.

Corporate Office: F-84, East of Kailash, New Delhi - 110 017, India

Project Office: Chandra Nagar, Palakkad - 678 007, Kerala, India

Ph: +91 491 2572576, Email: mail@hrdsindia.org



# HRDS INDIA

The Highrange Rural  
Development Society



PRESIDENT

Dr. S. Krishna Kumar IAS (Rtd.)  
Former Union Minister, Govt. of INDIA

FOUNDER / SECRETARY

Aji Krishnan

At present, HRDS INDIA is implementing „Sadhgraha” Tribal Housing Project at Attappadi in Palakkad District and Vythiri in Wayanad District of Kerala State. One Thousand (1000) houses are being constructed for the Tribal homeless, left out families in Attappady, out of which Three Hundred (300) houses are ready to be handed over to the beneficiaries and remaining Seven Hundred (700) houses are in its final stage of completion. HRDS INDIA has decided to extend the Sadhgraha Tribal Housing project in Idukki District of Kerala as well.

Under the project „Karshaka”, HRDS INDIA has judiciously decided to associate with the Tribal people in cultivating Medicinal plants in 5000 acres of the land owned by Tribal communities in Attappady, Palakkad District of Kerala. This project would certainly prove to be revolutionary for the tribes in consideration. HRDS INDIA’s „Sadhgraha” Tribal housing project is providing secured and hygienic living condition for the Tribal people. Through successful implementation of Karshaka project, HRDS INDIA foresees economic sustainability and livelihood of the Tribal people. It will definitely create a noticeable change in the living standards of the Tribes under scrutiny.

In order to achieve our mission of providing social services to the oppressed and neglected community, we severely require a financial backing. Due to the grave needs of the funds, we look forward for your kind monetary support and guidance for implementation of “**Karshaka**” Project. Also this would cost about **Rs.270,00,00,000/- (Rupees Two Hundred and Seventy Crore only)** for the cultivation of medicinal plants in 5000 Acres of land owned by the Tribal people of Attappady, Establishment of National Research Centre for Medicinal Plants and Environment (NRCME) and The Establishment Spices and Raw Medicine Extraction Unit. The project will serve two purposes; first, it will ensure economic security to the tribal people. On the other hand, it will also improve living standard of the highly deprived Tribal community altogether.

Yours Sincerely



Aji Krishnan

Founder – Secretary, HRDS INDIA

# KARSHAKA PROJECT

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## PROJECT



HRDS INDIA

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# CONCEPT OF THE PROJECT

The project under consideration is located at Attappady, Palakkad district of Kerala State. Attappady region is chosen for several reasons. Firstly, uncontrolled deforestation, over-grazing, inappropriate methods of agricultural practice, etc., have all contributed to the indiscriminate removal of dense forest cover of this area since the second quarter of this century. However, with the influx of settlers the process of deforestation in Attappady became extensive. The new form of cultivation brought by companies require forest clearance, and the process of deforestation has been accelerated. This has led to large scale erosion and low productivity in the occupied land of this area. Deforestation as a consequence of inappropriate forest management and unhealthy human interactions have produced a semi-desert within a few kilometres of the lush evergreen forests of Muthikulam and silent valley ranges. After the plundering of the forest of Attappady, severe practice of different types of cultivation is being practiced and this has destroyed the forest regions. Continuous ploughing and weak terracing resulted in top soil erosion on an extensive scale. They are least concerned about the ecological nature of the area. In the keen struggle to hold on their land and build up their resources base, tribals of this region have put all their energy into the land indiscriminately and regardless of its environmental consequences. Thus the new cultivation practices, along with deforestation,, intensified the process of deterioration of the fertile lands of Attappady. The extensive shift of Irulas and Mudugas towards settler type cultivation, mainly for want of money, has created extensive patches of denudation near their hamlets and fragile upper reaches. In these areas tribals began practicing cultivation of crops like tapioca and cotton, quite unsuitable to the areas. For many years the settlers have exploited the ignorance and illiteracy of tribals and plundered their resource. Instead of leaping from this bitter experience, they do still seek help in cash and kind from the exploiters, thus aiding and abetting the destructive process even further.

Tribal culture is cognate with tribal economy and so, their economic system can be understood only within the purview of cultural factors. In the conventional wisdom of economics, economic factors like social and cultural relations are considered non-essential, though they are the tribal reality for the very organization of their economic process. The traditional tribal economy is generally based on forest and characterized by simple technology. Tribal culture and forest have been inseparable entities. Both have been inter-dependent and inter-related. Forest has played a significant role in shaping the social, economic, religious, political and cultural systems of tribal societies. Economically forest and tribals are closely related and inter-dependent. The system by which human resources and natural resources are governed is known as economy. The tribal economy is based on forest because economic institutions like production, consumption, distribution, market, trade, labour etc all are related to forest. Tribals in general and tribals in Attappady are not like general masses. Their main food items are ragi, thina, chama etc. which they cultivate through shifting cultivation. In addition to this, forest has provided them many

resources for meeting their life. These items obtained from the forest plays significant role in controlling and maintaining the health of tribals. But due to the destruction of forest and environmental degradation they began to face shortage of these items. Lack of rain and droughts caused damage to their traditional agricultural system and as a result of this they lost their traditional food habits, which affected their health and living conditions. Traditional economic structure of tribals in Attappady is the following:

1. Hunting
2. Food gathering
3. Collection of Minor Forest Produce
4. Collection of fuel and fodder
5. Artisan activities
6. Shifting cultivation

Attappady area is mainly consists of Tribal people, particularly the unemployed women and children, who would be benefited by this ventures. The main source of income of the tribal people is from coolie job. However, during the off season the people have to look for some other means of livelihood. Since the demand for medicinal plants is ever increasing as people are more and more fascinated towards herbs, this project will help in solving both the problems. The trained tribal people with the help of experts in the cultivation of medicinal plants in their own lands. This will serve as a repository of medicinal plants, where farmers/ traders can come and learn growing harvesting, grading and value addition techniques of medicinal plants. There is a need to cultivate for larger production and authenticity. Cultivation will help in conservation of some of the medicinal herbs that are being pushed to the danger of extinction. Cultivation of medicinal plants are not only economical but ecologically safer too.

Life of tribal women associated with beliefs, customs, social mores, precepts, rights, and usages practiced since time immemorial, is not always conducive to the interest of women. Some of the experiences are particularly oppressive to women. Women shoulder heavy responsibilities commensurate with men, tribal customary laws like those of non-tribal societies deny them equal rights to property. Inheritance rights in most tribal society are favourable to men in general; women are entitled only to maintenance rights and expenses for marriage, while men inherit all other movable and immovable property. Even in case of societies which follow matrilineal pattern of inheritance, when it comes to land, a sharp distinction is made between „ownership“ and „control. While ownership of land is transmitted through women, control invariably lies with men. Tribal women face many constraints in their access to common property resources. A tribal woman occupies an important place in the socio-economic structure of her society. Unlike in non-tribal society women are not treated as drudges or beasts of burden, they are found to be exercising a relatively free and firm hand in all aspects related to their social life. Though tribal women are away from the mainstream of national life, they



are not kept away from the impact of socioeconomic changes affecting the neighbourhood or society in general. In the process of change the tribal woman whether she likes it or not, is forced to adhere to certain 18 norms which may even take away her freedom, her control over whatever primitive production factors their families possess, her control over production, her home, family and children and even her own life. The process of such alienation has an impact on the tribal woman by altering her complete life span. Her life is tagged on to her male partner's as in the case of a non-tribal society. Since tribal communities have been subjected to various forms of deprivation such as alienation from the land and other forest resources, which however did not cease with the gaining of independence of the country. As part of a tribal society, she has to suffer and yet survive for the sake of her children and the community. Each tribe in a tribal community has its own distinct characteristic life patterns and life styles, indicating wide variations in their cultural and economic formation. Each tribal group has its own interests and unique identity and women in these groups exclusively represent such a distinct identity.

In spite of poverty, a high rate of illiteracy and ignorance prevalent in the society, the tribal woman remains honest and hard-working. In the shift from traditional society to modern orientation, development processes have neglected both women and environment. The distinctive of Indian culture consists of its having defined life in the forest as the highest form of cultural evolution. Tribal economy is intimately connected with the environment. The forest regions are generally inhabited by the tribal communities. The problems of tribal women cannot be isolated from the problems of tribal men. These arise from their shrinking economic base due to massive felling of trees or the degradation of nature, the employment problem of tribals inescapably had a serious impact on the well-being of their children

The Karshaka Project in Attappady aims to cultivate 5000 Acres of Medicinal plants in natural farming and chemical free zone concept. The beneficiaries of the project will be from the Members of Agriculture Development Committee of HRDS INDIA. The project will continue for a period of 35 years with the mutual understanding by the beneficiaries and HRDS INDIA. The Project will be a revolution in the raw material market for Ayurvedic Products, and also it will be a great step for the tribal development. The regular income from the cultivation will provide an economic security for the tribal people in Attappady. The economic security will tend into the change in their life in all aspects.

The tribals consist of a well-knit cohesive group. They depend on forests and live in mutual co-operation and support. This practice links them with the economic system and environment in which they live. Any change in the system will have a pervasive effect on other systems. As a result of the destruction of the environment and increasing pressure from the village many men have to migrate to other region, which increases the workload of women. Thus the economic status of the family particularly of women deteriorates due to the migration.

Moreover, in the absence of men, women are left to fend for themselves and deal with the exploitative elements such as moneylenders, businessmen and landlords. Tribal women with low literacy are especially susceptible to this situation, leading to land alienation, cheating in weighing and pricing and sexual exploitation.

Due to environmental degradation and decline in the availability of minor forest produce, the nutritional status of tribal women has been severely affected. The reduction in the extent and quality of land available for shifting cultivation, the disappearance and reduced availability of minor forest produce along with the forest have thus led to a decline in the quality and quantity of food consumed especially by those families who get little or no food grains from the private lands. While these factors would affect everyone, they have special significance for women, since they are the providers of food to the family. In their effort to cater to the needs of everyone, there is every possibility of discrimination against women and children. Thus in food intake, deforestation affects the lower classes more than the upper classes, women more than men. Thus the developmental policies have accentuated existing inequalities and have introduced new ones, also among the tribals as they have done elsewhere in India.

Many factors were identified by HRDS INDIA team for this deplorable situation. One of them is the massive in-migration of people from thickly populated plain land to this thinly populated mountain slope. The immediate consequence of such migration was large scale deforestation. It was followed by the introduction of different land use activities, quite different from the traditional ways of land use in this region. In the course of events, the tribals lost their land. demographic structure of Attappady changed, cropping pattern got diversified, traditional techniques of production were ruined, new crops and new techniques of cultivation, and the entire cost and return structure of production underwent radical change. Till the second quarter of the century, the area was inhabited only. Tribal women are the worst affected in the process of change.

Displacement for development project such as this under HRDS INDIA would prove to be a boon for the tribal communities residing in the forest. Today they have to walk much longer distances than in the past to collect food and fodder. Development schemes have effected a through change in the socioeconomic and cultural life of the tribal women. Private property in land and recognition of husband as the head of the family has created a negative impact on the status of women. improved facilities of development like transportation, health, housing and technology have not reached women. Women continued to work harder and have no time to enjoy the fruits of development. In the shift from traditional tribal society to the modern welfare oriented society, development processes have neglected both tribal women and forest environment. Services in the field of health, education, and environmental spheres are too inadequate to bring about any significant improvement in the social and economic life of tribal women.

# TERMS AND CONDITIONS OF KARSHAKA PROJECT

## *“CULTIVATION OF MEDICINAL PLANTS IN ATTAPPADY FOR THE SUSTAINABLE LIVELIHOOD OF TRIBAL PEOPLE”*

As aforementioned, KARSHAKA unequivocally corroborates for those tribal farmers who own their land. Similar to this project, HRDS INDIA has also effectuated several other initiations for the betterment of the tribal people. Like „SADHGRAHA', a tribal home development project which endorses for the construction of free homes for the homeless tribal families under the project. Acres of land are inherited by the tribal population which is then, left unkempt and untended in the regions of Attappady. It is the responsibility of all Indian citizens to spread the merits of Ayurveda and Yoga, which was handed over into posterity from the time immemorial from the inception of Vedas, *Rishis* and *Acharyas* which was a dominant part of our culture. It is necessary to propagandize the concept of Yoga and Ayurveda in this era. Fortunately, from the influence of our Prime Minister Sri.Narendra Modiji, United Nations Organizations has initiated to spread the concerns for Yoga and Ayurveda worldwide. As a part of this, the practices of Yoga and Ayurveda are well received by people all over the world. Its fruitful impact has enriched India massively. But the problem arises when in India such ideas are hindered by these Ayurveda pharmaceutical industries. These firms are facing scarcity of raw materials from the country which has resulted in increase in the cost of Ayurvedic Medicines and Products.

To tackle this issue of cost hike in Ayurvedic Medicine and Products, HRDS INDIA is garnering an initiative - Project „Karshaka“, for the promotion of medicinal plants in the country. HRDS INDIA believes that it is an efficient way to address such a contesting problem. This project will accelerate the availability of high quality raw materials for the Ayurvedic Product Market, and can also convert plain lands of Tribal people into Agricultural land. Through this HRDS INDIA can ensure a minimum income for the local tribes and will eventually make a noticeable change in their lives too. The Project Karshaka will also help to bring the oppressed and marginalized Tribal People into the main stream of the society.

The major Ayurvedic Pharmaceutical Industries in India; Patanjali, Himalaya, Dabur etc. has offered their full support and cooperation to HRDS INDIA for the implementation of Karshaka Project.

These Tribal communities used to follow their traditional agricultural methods but somehow this conventional ecosystem collapsed and basic convenience of their lives became deficient, undernourished and underprivileged. Moreover, different grazing land of livestock is overly grown with unwanted weeds and grasses, and the fertile topsoil is being eroded. If this situation persists, the land will be equivalent to an uninhabited land. To prevent this situation HRDS INDIA has put forth myriad farming and agricultural proposals to encourage the traditional farming that would foster the employment sector and cultivate fertile lands by crop cultivation, farming, water conservation, herbal farming, horticulture, sericulture etc.

To revive the time-honoured ecosystem of tribal population there is a necessity to ensure and prioritize their individual rights and freedom. Presently, the landlord farmers have no capital to cultivate their land. As a solution to these circumstances, HRDS INDIA is taking the initiatives and targeting the overall furtherance of tribal groups in every area and in every manner possible. HRDS is working for the past 22 years for the upkeep mainstream access to the marginalized society. In order to promote the socio - economic refinement of the tribal populace in Attappady and for the execution of the project KARSHAKA under the administration of HRDS INDIA, an agreement has been duly signed and legalized by Both Parties, HRDS INDIA Agricultural Development Council and the Farmer who vested the Land for the Karshaka Project. To carry through the project KARSHAKA, the following provisions are to be accepted by the parties for the impartation of land which are mentioned underneath.

**Provisions at a glance:**

1. The responsibility of undertaking the project is to the Agricultural Development Council which has been formed under the leadership of HRDS INDIA.
2. HRDS INDIA has all the resources needed for the cultivation in the land conceded by the tribal people for a long term lease (preparing the soil, availability of water, organic fertilizers and seeds).
3. As per the agreement, the second party who is giving land to the Project Karshaka will be given 1000 rupees per acre by HRDS INDIA, at the time of signing the Agreement to meet the initial expenses.
4. The essence of Natural Farming is decided to be espoused under the method of conservation of soil and water, nature conservation and food security for the generations to come.
5. The Land included in any government scheme are not in any way included as a part of this Project.
6. Full cash transactions including wages and reimbursement to the farmers in connection with the project will be done only through the bank account.

7. 60% share of the profit from the Project generated after the expenditure of farming and other expenditure will be given to the farmer who vested the land for the project, and the rest 40% of the funds will be utilized for the re-farming expenses and other expenses.
8. The contract will be promoted to encourage cattle farming for the successful implementation of the project.
9. The agricultural development committee shall have full freedom to impart irrigation facilities for agricultural purposes.
10. The money getting from the marketing of products after harvest will be given to the farmer directly through his BANK ACCOUNT.
11. The income availed by each cultivator will depend on the size and area of the land and the type and varieties of crops cultivated on the land.
12. To ensure food security and health of the tribal population, cultivation of traditional crops such as panchdanya, long term crops and horticulture for the protection of land, water, and rearing of 1001 medicinal plants in accordance with the values of Indian culture has been manifested by the organization.
13. HRDS INDIA shall ensure to safeguard the tribal land and habitat and protect from any encroachment and exclusion of such land.
14. The farmer will be permitted to recede themselves from the project midway but they will have to give three months advance notice to the Agricultural Development Council and the Farmer must have to pay the total agricultural expenses which has to be reported to the concerned farmer in the Agricultural Development Council.
15. Agricultural Development Council will be responsible to acquire the agricultural land and its development and trading of the agricultural resources.
16. All the farmers who are the members of this project will be provided with a digital identity card (Smart Card) by HRDS INDIA.
17. HRDS INDIA will bear all the expenses associated with the project.
18. The marketing of all the products produced here will be apportioned by the Indian Tribal Agricultural Produce and Marketing co-operative society formed by HRDS INDIA. This society will be affiliated with the „Trifed Federation“, which is commissioned by the Government
19. The Projects and other activities that are being implemented in the covenant will be under the supervision of HRDS INDIA Agricultural Development Council.
20. An Agricultural Advisory Board will be formed by HRDS INDIA, including Agricultural



Experts, Agricultural Scientists, M.P, M.L.A, District Collector, Sub Collector, ITDP Officer, District Panchayat President, Members and Presidents of Grama Panchayats and elected representatives among the Farmers.

21. Apart from these committees, each category will have special working committees and their conveners.
22. There will be no payments as rent for the land during the period or after the period of the Agreement to the Land Owner.
23. A committee will be constituted by HRDS INDIA including the full membership holders of the Project (Beneficiary Committee).
24. The outlandish farmers who are unspecified with the land management will be guided by the Agricultural Experts. As per the guidance and instructions given by the Agricultural Experts should be followed in the farming. The method of cultivation and the type of crop appropriate to the soil.
25. As HRDS INDIA advances the main objective of promoting Non- Toxic Agriculture. All farms being a part of this project will be implemented in a full-fledged natural organic farming system.
26. HRDS INDIA has pledged to make Attappady a chemical free zone region.
27. The contract for maintaining the existing value assets on agriculture will be protected.
28. Agricultural jobs that are a part of this project are prioritizing the families who bequeath their lands to the project.
29. As a remuneration for agricultural workers the wage will be given according to the National Rural Employment Guarantee Scheme. The wages will be transferred directly to their bank accounts.
30. The Agricultural Development Committee should have full power to construct, maintain all the temporary structures and shelters (security room, motor room, office, toilets and store room) required for the smooth functioning of the project.
31. All the farmers involved in this project will be ensured with free insurance aid by HRDS INDIA.
32. All the temporary buildings constructed during the period of this project should be favourable to the environment.
33. At the end of the term of the contract the Agricultural Development Committee shall vest all the farming & cultivation, allied items, buildings to the farmers concerned.

34. It is a fine and sterling system that guarantees the land's succession should be as per matriarchal inheritance.
35. The Land Owner is responsible for maintaining the terms and conditions of the agricultural development committee without any difficulties in the value added, cultivation and marketing.
36. In case of death of the owner of the land or any physical malady which may cause any hindrance in the participation in the project, then the responsibilities will be followed by their heirs.
37. In the fields of agriculture, the farmers will be provided with medical facilities, drinking water, toilets, washrooms, along with gloves, footwear, hats required on the field by the Agricultural Development Council.
38. After the specified time limit in the contract, the Agricultural Development Council shall give the land back to the land owner without any compensation.
39. This agreement will automatically be inactive at the end of the term of the contract.
40. The contract can only be renewed, and the project can be continued only with the interest of the parties concerned after the end of the contract.
41. The land given for the project shall never be traded or owned by the first party in any way as the land is solely used for the agricultural purposes. The committee or organization won't entertain the usage of land for any fringe benefit.
42. The agricultural development committee should submit a periodic report to HRDS INDIA which has been reviewed by the sub - committees that are constituted for the project monitoring in due course of time and which is then properly monitored and evaluated for the progress and better ways to continue the activity.
43. This project by HRDS INDIA is defined according to the rules and regulations governed and enforced by the Government for the Tribal population from time to time.

# CHAPTER - 1

## INTRODUCTION



## QUICK REFERENCE IN ORGANIZATIONAL PROFILE

<b>Name Of The Organization</b>	<b>HRDS INDIA</b> <b>(The Highrange Rural Development Society)</b>
<b>Established in</b>	1997
<b>Name Of The President</b>	<b>Dr. S. KRISHNAKUMAR IAS (Retd)</b> (Former Union Minister Govt. Of India)
<b>Name Of The Secretary</b>	<b>Mr. AJI KRISHNAN</b>
<b>Corporate Office</b>	F-84, Kailash Nagar, New Delhi.
<b>Registered Office</b>	Kattappana, Idukki, Kerala.
<b>Project Office</b>	Chandranagar, Palakkad, Kerala – 678007
<b>Website</b>	<a href="http://www.hrdsindia.org">www.hrdsindia.org</a>
<b>Contact mail</b>	<a href="mailto:mail@hrdsindia.org">mail@hrdsindia.org</a>

## QUICK REFERENCE IN PROJECT PROPOSAL

<b>Name Of The Project</b>	<b>KARSHAKA PROJECT</b>		
<b>Implementing Agency</b>	HRDS INDIA (The Highrange Rural Development Society)		
<b>Nature of the Project</b>	Cultivation		
<b>Location of the Project</b>	Attappady, Palakkad, Kerala, India		
<b>Number of Beneficiaries</b>	1667 (Direct)		
<b>Cost on Components</b>	<b>Medinal Plants Cultivation</b>	<b>Research Centre</b>	<b>Spices and Raw Medicine Extraction unit</b>
	195,80,00,000	8,60,00,000	65,60,00,000
<b>Total Amount of the Project</b>	<b>Rs.270,00,00,000/-</b>		

# PROFILE OF THE IMPLEMENTING ORGANIZATION - HRDS INDIA

## Introduction

HRDS INDIA (The Higrange Rural Development Society) is a non profit community based organisation working for the upgradation of Tribal community, women empowerment, education and livelihood promotion. HRDS INDIA aspires to improve the living conditions of the poor and marginalised people by adopting strategies through community initiative, participation and sensitization. Founded in 1997, the organization has worked among backward communities in the interior. Unreached pockets of tribes in Kerala. Women self help groups have been taken as the base for all interventions and livelihood activities enabling them to contribute towards mainstream of the developmental activities.

## Vision

Compassion for downtrodden people and nature, equalize and sustainable Society. Our mission is to promote all aspects of Tribal and Rural development throughout India, integrated approaches to help downtrodden people mobilize for self-sustaining development initiatives. Our efforts are directed at rehabilitating total human development and bringing about social change through awareness as well as forming local level organizations to ensure social justice and self- reliance. We aim to equitable economic conditions of poor communities by realizing the potential of personal skills and resources.

## Mission

HRDS INDIA<sup>1</sup> is dedicated for uplifting the status of tribal community through various developmental initiatives.

## Legal status

Registered under	: TCLS&CS Registration Act 1955
Registration No	: I -170/97 Date 13/08/1997
FCRA NO	: <b>052940065/02</b>
Bank Account No.	: Current Account : <b>37253354403</b>
IFSC Code	: <b>SBIN0016079</b>
Swift Code	: <b>SBININBB397</b>
Address	: State Bank of India Marutharode Branch, Chandranagar.P.O., Palakkad-678007, Kerala, India.
12AA of IT Act No.	: CIT/CHN/12A/Tech75/2001-02 Dated on: 14/01/2004
80G (5) VI of IT Act No.	: CIT/CHN/12A/Tech 75/2001-02 Dated on: 30/05/2007

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<sup>1</sup> HRDS INDIA : The Higrange Rural Development Society

## Objectives

- To provide Houses for the Tribes those who are living in extremely backward situation.
- To promote Community Based Organizations at grassroots level for sustainable development of Tribes.
- To provide livelihood promotion and social inclusion services to the poor and low income clients in the rural and semi urban areas with innovative solutions.
- To promote value based education among children, women and youth for Holistic Development.
- To promote Agriculture, Natural farming, Medicinal Plants and related activities among the poor people in the society
- To provide capacity building to various stakeholders and undertake evidence based research on various development themes.
- To work on various issues like HIV/AIDS<sup>2</sup> prevention, Environment and Climate change.
- To network with Government, NGO's<sup>3</sup>, and CBOs<sup>4</sup> for advocacy and policy level changes.

## Strategy

- HRDS INDIA strives to improve the quality of life of the Rural poor especially Tribes by strengthening their existing livelihood programmes, initiative new activities to diversify and increase their income.
- To develop community owned and managed institutions to sustain the livelihood activities.
- To develop well trained and highly capable local service providers to provide timely support to the members.
- To develop community based models for natural resource management in order to protect and use the resources for sustainable development.
- To work in collaboration with the Government and the industry.

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<sup>2</sup> HIV/AIDS : Human Immuno Virus/Acquired Immuno Deficiency Syndrome

<sup>3</sup> NGO's : Non-governmental organizations

<sup>4</sup> CBO : Community Based Organizations

# **CHAPTER - 2**

## **BACKGROUND OF THE PROJECT**



# INDIAN SCENARIO

Plants have been used for medicinal purposes long before recorded history. Primitive men observed and appreciated the great diversity of plants available to them. Plants provide food, clothing, shelter, and medicine. Much of the medicinal use of plants seems to be developed through observations of wild animals, and by trial and error. As time went on, each tribe added the medicinal power of herbs in their area to its knowledge base. They methodically collected information on herbs and developed well-defined herbal pharmacopoeias.

Many drugs listed as conventional medications were originally derived from plants. Salicylic acid, a precursor of aspirin, was originally derived from white willow bark and the meadowsweet plant. Cinchona bark is the source of malaria-fighting quinine. The opium poppy yields morphine, codeine and paregoric, a remedy for diarrhoea. Laudanum, a tincture of the opium poppy, was the favoured tranquilizer in Victorian times. Even today, morphine the most important alkaloid of the opium poppy remains the standard against which new synthetic pain relievers is measured. similarly, tetrahydrocannabinol (THC), the component of *Cannibis sativa* responsible for the CNS effect, has also been found to reduce nausea associated with cancer chemotherapy. Another therapeutic area where natural products have had a major impact on longevity and quality of life is in the treatment of cancer. In fact, most of the major anticancer drugs are natural products either from plants or micro-organisms. Examples include important anticancer drugs such as Bleomycin, Doxorubicin, Vincristine, Vinblastine, and now the recent addition of Paclitaxel (Taxol), Ironotecan (a camptothecin derivative) and Etoposide and Tenoposide (Podophyllotoxin derivatives).

India is one of the most important country in the world in term of floristic diversity. About 54% of the country's land is under cultivation for food, ornamental and medicinal plant crops and approximately 19% area has varying degree of forest vegetation cover. Land based developmental activities provide means of livelihood, health and opportunity for employment. India has global position in the field of traditional medicines. About 90% herbal raw drugs used in the manufacture of vegetable drugs are obtained from the wild source which is limited. There are about 45,000 plants species in India which are in abundant in the regions of eastern Himalaya, western Ghats and Andman and Nicobar Islands. The rich heritage of flora is due to diversified and varied agro-climatic conditions. The official documented plants with medicinal potential are 3,000 but traditional practitioner use about 8,000 vegetable drugs. India is the largest producer of medicinal herbs and approximately called the botanical garden of the world [1]. In Indian medicinal systems the most practitioners formulate and dispense their own recipes; hence, this requires proper documentation and research.



There are currently about 2,50,000 registered medical practitioners of the Ayurvedic system; the total for all traditional systems being nearly 2,91,000 as comparable to 7,00,000 of the modern medicines.

In rural India, 70% of the population is dependent on the traditional system of medicine. In western world also the practitioner of herbal medicines is steadily growing and approximately 40% of the population is taking herbs to treat diseases [2]. Public, academic and governmental

interest in traditional medicines is growing exponentially due to increased incidence of the adverse drug reactions and economic burden of the modern synthetic drugs [3]. In 1997, it was estimated that about 20% of the world's population lived in extreme poverty and lacked basic medicines [4]. The herbal drugs, which are cheap with less side effects, will be helpful to cure diseases of all the people including countries of the third world.

HRDS INDIA introduces Karshaka Project to ensure economic security to tribal people in Attappady of Palakkad District, Kerala through the promotion of cultivation of Medicinal Plants.

Attappady is a large geographical area located on the Western Ghats. The majority of the population in Attappady block is Tribal people. Irula, Maduga, Kurumba are the main communities living in Attappady. There are around 192 Tribal hamlets and a total tribal population of around 30000 people.

The Attappady Tribal Block is backward in all aspects. The Tribal people of Attappdi lacks behind the general population in Education, Health, Occupation, living standard etc. There should be creative interventions to bring them up into the main stream of the society.

The project Karshaka is a professional approach to train and to make tribal people enable to cultivate medicinal plants in their land. It will ensure an economic security for the tribal people and also it will results in the upgradation of their life standard.

## Objectives

➤ The basic objective of the project Karshaka is to promote the cultivation of medicinal plants among the tribal people in Attappady Tribal block.

### Ultimate objective of the project is to:

- To promote cultivation in the land owned by the Tribal people
- To promote, cultivate and development of medicinal plants for the sustainable utilization.
- To promote alternative source of income to the tribal people in Attappady.

### Scope of work

- To review the present land utilization in the area
- To review the climatic condition of the area
- To review the market for the medicinal plants
- To review the present manufacturers of medicinal products.

## Approach and Methodology

Detailed socio-economic or environmental survey is most required to update the living status of the people those who are residing in the proposed sites. This detailed survey report will be incorporated in the detailed report. Survey data will analyse more precisely to make available the facilities to the deserved people in the targeted sites. Also it will be exact proof to explain the environmental as well as the socio-economic status of the people residing over there. The detailed methodology given in below:

### Methodology

Methodology	Explanation
Categorization of sites in Tribal areas in India	Sites has to categorise as primary and secondary to fill up the needs according to the preliminary field survey.
Provider Assessment	Role, responsibility, accountability mapping, governance parameters.
Detailed Survey (Socio-Economic and Environmental concern)	Detailed survey in all aspects is most required to analyse the existing situation.
Stakeholder Analysis	Inventorization of stakeholders, identification of key stakeholders, map perceptions, concerns, incentives and disincentives.
Stakeholder workshops	Conduct stakeholder workshops to validate the draft/final reports.
IEC <sup>5</sup>	Training programmes to be conducted for the up gradation of tribes before and after finalising the proposed projects. Also requires research studies in the site to avoid impacts during project implementation or further developmental activities. Also these kind studies can provide suitable mitigations measures to tackle the issues while implementing the project.
Initiative for implementing the project in the selected locations	Cultivation of medicinal plants in the selected lands.

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<sup>5</sup> IEC: Information, Education and Communication

# SWOT ANALYSIS

STRENGTH	WEAKNESS
OPPORTUNITIES	THREAT

## Strength:

- Highly skilled project staffs
- Familiar with the locality
- Co-operative tribal farmers

## Weakness:

- The lack of availability of water in summer.

## Opportunity:

- Natural resources in the project locality including river.

## Threat:

- Disturbance of elephants and other wild animals.
- Natural calamity, drought in summer times.

## Description

The project location is very familiar to HRDS INDIA. At present HRDS INDIA have Sadhgraha project office in Attappady (project location). The project staffs in Karshaka project are highly skilled in the cultivation of medicinal plants and in Ayurvedic field. The area is dry in the usual summer times, eventhough the nearby river will be a water source for the project in summer. The threats can be overcome with discussions with the local bodies.

## Relevance of the project to the work already going on in the Organization

HRDS INDIA is a registered NGO working for the upliftment of poor people all around India, especially the Tribal people who are extremely marginalized from the main stream of the society. HRDS INDIA has a vision of upliftment of Tribal people. With this vision HRDS INDIA have already initiated “Sadhgraha” Tribal Housing Project for the homeless Tribes in India. In Attappady 1000 houses are being completed in the first phase. Out of it 300 houses are already completed. Along with the Sadhgraha Tribal Housing Project HRDS INDIA targeting to the holistic development of Tribal people. House itself is not enough for holistic development so that HRDS INDIA takes an initiative to promote cultivation of medicinal plants among the tribal people in Attappady through it HRDS INDIA can ensure the economic security of Tribal people. As an income generation programme for Tribal people in Attappady HRDS INDIA gives very importance to this project – Karshaka. It is a new step of HRDS INDIA towards the Tribal development.

## MARKET SCENARIO

**Short list of important natural product drugs, scaffolds structures, synthetic or semi-syntheticanalogs.**

Sl.No.	Drugs from herbs and plants	Source	Therapeutic activity	Synthetic or semi-synthetic analogs
1	Atropine	<i>Atropa belladonna</i>	Antimuscarinics	Dicyclomine Hcl, Hyoscinebutylbromide
2	Benzyl penicillin	<i>Penicillin chrysogenum</i>	Antibiotic	Ampicllin, amoxycillin.
3	Codeine	<i>Papaver somniferum</i>	Analgesic	Nalarphine, meperidine.
4	Camptothecin	<i>Camptotheca accumnata</i>	Anticancer	10-hydroxy camptothecin, aminocamptothecin, topotecan, ironotecan.
5	Digoxin	<i>Digitalis lantana</i>	Cardiovascular	-

6	Ephedrine	<i>Ephedra</i>	Anti-asthma	Salbutamol, salmeterol.
		<i>vulgaris</i>		
7	Lovastatin	<i>Aspergillus terrus</i>	Hypercholesterol emia	Pravastatin.
8	Morphine	Papaver somniferum	Analgesic	Heroin, naloxane, phthadine
9	Podophyllotoxin	Podophillum peltatum	Anticancer	Etoposide, teniposide.
10	Quinine	Cinchona succirubra	Anti-malarial	Chloroquine, mefloquine, pamaquine, primaquine.
11	Reserpine	Rawolfia serpentina	Hypotension and Anticholinergic	-
12	Tubocurarine	Tube curare	Neuro-muscular blocking agent	Decamethonium, suxamethonium.
13	Taxol	Taxus baccata	Anticancer	-
14	Teniposide	Bathypodium javanica	Antihypertensive	Captopril, enalapril, lisinopril
15	Vinorelbine, Vincristine	Catharanthus roseus	Anticancer	Vindesine.

In India the medicinal plant market is unorganized at present. Pharmaceutical industries are responsible for inefficient, imperfect, informal and opportunistic marketing of medicinal plants. Herbal drug trade is wasteful, secretive and unregulated. Adulteration is common in wild plants which grow in the absence of a policy attention. The value of medicinal plants related trade in India is 5.5 billion US dollars. India's share in the global export market of herbal drugs is less than 0.5 per cent. The Chinese export based on plants is nearly Rs 18,000-22,000 crores. India exports crude drugs mainly to developed countries viz. USA, Germany, France, Switzerland, UK and Japan. Aconite, Aloe, Belladonna, Acorus, Cinchona, Cassia tora, Dioscorea, Digitalis, Ephedra, Plantago and Senna are the principal Indian herbal drugs exported to foreign countries. Deficient toxicological studies and quality control affect the export of herbal drugs. The export of medicinal plants contributes about 9% which is next to export of edible plants. About 165 herbal drugs and their extracts are exported from India [6]. It is important to grow the medicinal plants on unused land or as an intercrop with other plants. The conservation will help to sustain medicinal plant resources to save endangered or extinct plants.

# MAJOR AYURVEDIC INDUSTRIES

Sl. No	Firm	Turn Over (Rs. Crores/Year)
1	Kottakkal Aryavaidyasala	65
2	Nagarjuna	15
3	Aryavaidya pharmacy	14
4	Vaidyaratnam Oushadhasala	13
5	Oushadhi	13
6	Kerala Ayurveda Pharmacy	9
7	Seetharam Ayurveda Pharmacy	5
8	Deseya Pharmacy	3
9	Santhigiri Ayurveda	3
10	Vaidyaratnam	1
11	CKKM	0.5
12	Santhosh Pharmacy	0.5

## LIST OF MEDICINAL PLANTS

Malayalam Name	Botanical Name	English Name
Pera	Psidium guajava	Guava
Thengu	Cocos nucifera	Coconut tree
Chemparathi	Hibiscus	Shoe flower
Parijatham	Nyctanthes arbor-tristis	Night-flowering jasmine
Chundakka	Solanum torvum	Turkey Berry
Cherunaranga	Citrus Limon	Lemon
Chittamruthu	Tinospora Cordifolia	Giloe
Karinochi	Vitex negundo	Chinese chaste tree
Neermaruthu	Terminalia Arjuna	Arjun tree
Maavu	Mangifera indica	Mango tree
Plavu	Artocarpus hetrophyllus	Jack fruit tree
Kasumaavu	Anacardium occidentale	Cashew nut tree
Cherunaranga	Anacardiaceae	Markingnut tree
Thippali	Piperlongum	Long Pepper

Orila	Desmodium gangettium	Desmodium gangettium
Devatharam	Cedrus Deodara	Himalayan cedar
Irattimadhuram	Glycyrrhiza glabra	Licorice
Koovalam	Aegle marmelos	Bael tree
Elam	Elettaria Cardamomum	Cardomom
Adalodakam	Justicia adhatoda	Malabar nut
Nelli	Ribes- uva-crispa	Gooseberry
Muringa	Moringa oleifera	Drumstick tree
Kariveppu	Murraya koenigii	Curry tree
Murukku	Erithrina indica	Indian coral tree
Koduveli	Plumbago zeylamica	Ceylon Lead Wor
Kanjiram	Strychnos nux-vomica Linn	Snake wood
Aryaveppu	Azadirachta indica	Neem
Venga	Pterocarpus	Malabar kino
Mathalam	Punica Granatum	Pomegranate
Satavari	Asparagus racemosus	Indian Asparagus
Aal maram	Ficus benghalensis	Banyan tree
Jathi	Myristica fragrans	Nutmeg
Poovarasu	Thespesia populnea	Portia tree
Karingali	Acacia Chundra	Cutch tree
Paal muthukku	Ipomoea mauritiana	Giant Potato
Njaval	Syzygium cumini	Java plum
Pon chembakam	Plumeria	Plumeria
Avanakku	Ricinus communis	Castor bean
Mula	Bambusoideae	Bamboo
Raktha chandanam	Pterocarpus santalinus	Red sandal
Chittaratha	Alpinia calcarata	Lesser galangal
Kadukka	Terminalia bellirica	Bedda nut tree
Mundhiri	Vitis vinifera	Grapes
Grampoo	Syzygium aromaticum	Clove
Gulgulu	Commiphora mukul	Indian bedellium
Thakkolam	Nigella sativa	Black cumin
Vaka	Albizia lebbek	East Indian walnut
Manjadi	Adenanthura	Red lucky seed

# HRDS INDIA KARSHAKA -NATURAL FARMING PROJECT

## LIST OF MEDICINAL PLANTS

1	THULSI
2	ACALYPHA INDICA
3	ACANTHUS ILICIFOLIUS
4	INDIAN GUM(ARABIC TREE)
5	MIMOSA CAESIA
6	MIMOSA CATECHU
7	ACACIA RUGATA
8	ACACIA CONCINA
9	ACACIA PENNATA
10	FARNESIANA
11	ACACIA FERUGINIA
12	ACHYRANTHES ASPERA
13	ACONITUM FEROX
14	ACORUS CALAMUS
15	AGAVE AMERICANA
16	AGLARIA ROXBURGHIANA
17	AGERATUM CONYZOIDES
18	MONKEY BREAD
19	RED WOOD
20	ADINA HORDIFOLIA
21	NAUCLEA CORDIFOLIA
22	ANAMIRTA COCCULUS
23	GROUND NUT
24	INDIAN BIRTH WOOD
25	PELICON FLOWER

26	ARRECANUT PALM
27	CHINESE GHOOSE BERRY
28	BEE LEMBI
29	WHITE MACROSE
30	AZIMA TETRACANTHA
31	WILD LIME
32	ANTIDESMA BUNIOUS
33	MEXICAN POPY
34	MONKEY JACK
35	JACK FRUIT TREE
36	WIDE JACK
37	ELEPHANT CREEPER
38	ASPARAGUS
39	UPAS TREE
40	RUBIACI
41	ANDROGRAPHIS ECHIOIDES
42	ANDROPOGON NARDUS
43	ROSHA GRASS
44	LEMON GRASS
45	KAASKAS/KOOSA
46	ECBOLAUM LINNEANUM
47	BLIME DING TREE
48	ECHINOPS ECHINATUS
49	EMBELIA ROBUSTA
50	EMBELIA RIBES
51	SELERY



52	EMILIA SONCHIFOLIA
53	GIANT RATTI
54	CHINESE ZOO MARK
55	AILANTHUS MALABARICA
56	PRICKLY LEAVED ELEPHANT FRUIT
57	SILON TREE
58	ELAEAGENUS LATIFOLIA
59	MALABAR CARDAMUM
60	ERIOAENA QUISQUALOCHIS
61	RED SIDAR
62	INDIAN CORNEL TREE
63	SENDORY
64	AERVALANATA
65	REDY JASMINE
66	INDIAN JALAP
67	GIANT POTATO
68	SWEET POTATO
69	GODS FOOT KEEPER
70	MORNING GLORY
71	INDIAN LORA TREE
72	MOON FLOWER
73	ODINA WODIER
74	PRICKLY PAIR
75	INDIAN SORAL
76	OXYSTELMA ESCULANTUM
77	OSCIMUM CANNUM
78	LEMON BASIL
79	INDIAN SNAKE ROOT
80	CHAYA ROOT
81	OLDENLANDIA CORYBOSA

82	INDIAN TRUMPET FLOWER
83	CHARIET TREE
84	CAPPARIS APHYLLA
85	CAPARIS SEPIARIA
86	CASARIA ESCULENTA
87	CASARIA TOMENTASA
88	CALLICARPALANATA
89	CAPPER PLANT
90	CAPPARIS HEYNENA
91	CAPPARIS HORIDA
92	CALOTROPIS GIGANTIA
93	KANDELIA RHEED
94	CAJANUS CAJAN
95	WILD SMORD BEAN
96	BLACK DEMMAR
97	KALANCHOE LACINIATA
98	CALOTROPIS PROCERA
99	CASSIA ABSUS
100	RING WORM PLANT
101	INDIAN LABARUNUM
102	CARAVEA
103	AJOVEEN
104	CARUM ROXVURGHIANUM
105	CANTHIUM PARVIFLORUM
106	INDIAN REED
107	CAPSICUM MINIMUM
108	CALYOPTERIS FLORIBUNDA
109	ALEXANDRIAN
110	BEAF WOOD
111	WINGED SENNA

112	TANERS CARCIA
113	FETID GRASS
114	CASSIA GLAUCA
115	CASSIA SOPHERA
116	AZADIRACHTA INDICA
117	BALLOON WINE/WINTER CHERRY
118	AFRICAN SAPHRUN
119	CANSCORA DIFFUSA
120	CANSCORA DESCUSSATA
121	CAREYA ARBOREYA
122	CARRISA CARAN DAS
123	KYLLINGA TRICEPS
124	KAEMPHERIA GALAGA
125	KAEMPHERIA ROTUNDA
126	CUCURBITA PEPO
127	CUCURBITA MAXIMA
128	CUCUMIS TRIGONUS
129	CUCUMIS MELO
130	CUCUMIS SATIVUS
131	CURCULIGO ORCHIOIDES
132	CURCUMA LONGA
133	CURCUMA AMADA
134	CURCUMA ANGUSTIFOLIA
135	CURCUMA AROMATICA
136	CURCUMA ZEDOARIA
137	DODDER
138	CUMINUM CYMINUM
139	CLEMATIS TRILOBA HEYNE
140	CLITORIATERNATA
141	CLEISTANTHUS COLLINUS

142	CLEODENDRON
143	CLEODENTRON INERME GAERTN
144	CLEODENDRON PHLOMIDIS
145	CLEODENDRON PHLAMOIDES WILD
146	CLEODENDRON SERRATUM
147	CLEOME VISCOSA
148	CRATAEVA RELIGIOSA FORSK
149	CRESSA CRETICA
150	KYDIA CALYCINA
151	CRINUM ASIATICUM
152	CRINUM LATIFOLIUM
153	COCHLOSPERMUM
154	CORIANDRUM SATIVUM
155	COLACASIA ESCULENTA
156	CORALLO CARPUS EPIGAEUS
157	COMMELINA OBLIQUA
158	COIX LACHRYMA JOBI
159	COSTUS SPECIOSUS
160	COSMOSTIGMA ACUMINATUM
161	COSCINIUM FENESTRATUM
162	COLDENIA PROCUMBENS
163	COLEUS AROMATICUS
164	CORCHORUS OLITORIUS
165	CORCHORUS CAPSLARIS
166	COORDIA WALLICHI
167	CORDIA MYXA
168	CORDIA ROTHII
169	COCULUS VILLOSUS
170	TRICHOPUS ZEYLANICUS
171	CROTON TIGLIUM

172	CROTALARIA GENCEA
173	CROTALARIA VERRUCOSA
174	RANGOON CREEPER
175	JURUGA PINNATA
176	RED MANGO
177	GAMPOG TREE
178	WHITE YEMETIC NUT
179	GARCINIA XANTHOCHYMUS
180	GARCINIA PICTORIA
181	GUTTERIA LAURIFOLIA
182	GOSSYPIUM ARBORIUM
183	INDIAN COTTON
184	GAULTHERIA FRAGRANTISSIMA
185	GOMPHIA ANGUSTIFOLIA
186	GLORIOSA SUPERBA
187	GUAZUMA TOMANTOSA
188	GUIZOTIA ABYSSINICA
189	LYQUORES
190	GRANTIA MADRAS PATTANA
191	GREWIA ASIATICA
192	MALABAR LANDS WOOD
193	GIRONNIERA RETICULATA
194	GYNANDROPSIS PENTAPHYLLA
195	SWEET PIG WEED
196	WILD SPY NAK
197	INDIAN MAHAGONY
198	PREEM ROSE VILLO
199	JUSTICIA JENDUROSA
200	PUGING NUT
201	JATROPHA GANDULIFERA

202	COMMON JASMINE
203	TREE JASMINE
204	JASMINUM GRANDIFLORUM
205	SMALL INDIAN EPIKA KUVANHA
206	CHAKKARAKOLLI
207	YELLOW OLIANDER
208	WHITE DHATHURA
209	PURPLE DHATHURA
210	THORN APPLE
211	NARAGAMIA ALATA
212	SPIKE NARD
213	CHORA JASMINE
214	AMERICAN TOBACCO
215	INDIAN LOTUS
216	NYPHEA LOTUS
217	BLUE WATER LILLY
218	INDIAN OLIANDER
219	NEPTUNIA OLERASEA
220	NEPTUNIA PROSTRATA
221	NOTONIA CORYMBOSA
222	TACCA PINNATIFIDA
223	TABERNAEMONTANA CORONARIA
224	TABERNAEMONTANA DICHOTOMA
225	TAMARIX DIOICA
226	TAMARINDUS INDICA
227	PTEROCARPUS MARSUPIUM
228	PTEROCARPUS SANTALINUS
229	PTEROSPERMUM ACERIFOLIUM WILD
230	PTEROSPERMUM SUBERIFOLIUM LAMK
231	TRAPA BISPINOSA ROXB

232	TECTONA GRANDIS
233	TEPHROSIA PUPURE
234	TERMINALIA ARJUNA
235	TERMINALIA CATTAPPA
236	TERMINALIA CHEBULA
237	TERMINALIA TOMENTOSA
238	TERMINALIA PANNICULATA
239	TERMINALIA BELERICA
240	TERAM NUS LABI ALIS SPRENG
241	TODDALIA ACULEATA
242	TORENIA ASIATICA
243	TINOSPORA CORDIFOLIA
244	TYPHA ELEPHANTIANA ROXB
245	TYPHONIUM TRILOBATUM SCHOFF
246	TYLOPHORA ASTHMATICA
247	TRIANTHEMA MONOGYNA
248	TRIUMFETA RHOMBOIDEA JACQUIN
249	TRAGIA INVOLUCRATA
250	TRIBULUS TERRESTRIS
251	TREWIA NUDIFLORA
252	TRICHODESMA INDICUM
253	TRICHOLEPIS GLABBERIMA
254	TRICHOSANTHUS ANGUINA
255	TRICHOSANTHES DIOICA
256	TRICHOSANTHES PALMATA
257	TRIGONELLA FOENUM
258	DIOSPYROS EMPRYOPTERIS
259	DIOSPYROS MELANOXYLON
260	DIOSCOREA OPPOSITIFOLIA
261	DIOSCOREA PENTAPHYLLA

262	DIOSCOREA SATIVA
263	DALBERGIA SISOO
264	DIPTEROCARPUS INDICUS
265	DIPLOSPORA SPHAERO CARPA-GAMPLE
266	DENDROCALAMUS STRICTUS
267	DENDROBIUM MACRACI
268	DESMODIUM GANGETICUM
269	DESMODIUM POLYCARPUM
270	PTELEA VISCOSA
271	DOLICHOS BIFLORUS
272	DREGEA VOLUBILIS
273	CISSUS QUADRANGULARIS
274	PANDANUS FASCICULARIS
275	PAPAVER SOMNIFERUM
276	PAVETTA INDICA
277	PAVONIA ODORATA
278	PEDALIUM MUREX
279	PENTAPETES PHOENICEA
280	PAEDERIA FOETIDA
281	PEUEDANUM GRAVEOLENS
282	WHIGHT FLOWERED LED VURT
283	FIRE PLANT
284	PAGODA TREE
285	PITHECOLOBIUM BIGEMINIUM
286	INDIAN BEACH
287	BIRDS TONGUE
288	POLYGONUM BARBATUM
289	INDIAN FIR
290	INDIAN PARCILEN
291	PORTULACA QUADRIFIDA

292	PUTRANJIVA ROXBURGHII-WALL
293	PUERARIA TUBEROSA
294	PIUNICA GRANATUM-LINN
295	PROSOPIS SPICIGERA
296	PREMNA INTEGRIFOLIA
297	PREMNA HERBACEA-ROXB
298	PIPER NIGRUM-LINN
299	PIPER CHAMBA-HUNTER
300	PIPER BETLE-LINN
301	PIPER LONGUM-LINN
302	BLEPHARIS EDULIS-PERS
303	BLUMEA FRONDOSA
304	BIOPHYTUM SENSITIVUM
305	BUTEA FRONDOSA
306	BUTEA SUPERBA-ROXB
307	BAMBUSA ARUNDINACEA
308	BASELLA RUBBA
309	BASSIA LATIFOLIA
310	BASSIA LONGFOLIA-LINN
311	BARLERIACRISTATA-LINN
312	BARLERIA PRIONITES
313	BARINGTONIA ACUTANGULA
314	ANNATTO
315	ASHPUMKIN
316	PIG WEED
317	FAN PAM/PAMIRAPAM
318	WILD CHEMBER
319	BAUHINIA OURPUREA-LINN
320	BAUHINIA RACEMOSA-LAM
321	BAUHINIA VARIEGATA-LINN

322	BOSWELLIA SERRATA-ROXBRED CROWN TREE
323	KADAPPA ALMOND
324	BRAGANTIA WALLICHI
325	BRAGANTIA WALLICHI-BR
326	BRYONIA LACINIOSA-LINN
327	WILD TURNIP
328	BLACK MUSTARD
329	MUSTARD
330	BREYNIA RHAMNOIDES-MULL
331	BRIDELIA RETUSA-SPERENG
332	MENISPAYERD
333	MORISHIYAS PLAM
334	FLACOURTIA SEPIARIA-ROXB
335	FLUGGEA MICROCARPA-BLUME
336	INDIAN GOOSEBERRY
337	PHYLLANTHUS DISTICHUS-MULL
338	PHYLLANTHUS RETICULATUS-POIR
339	PHOENIX SYLVESTRIS-ROXB
340	FENNAL/SWEET FENNAL
341	FOOD APPLESAFEETIDA
342	GREEN GRAM
343	PHASEOLUS TRLOBUS-AIT
344	BLACK GRAM
345	FICUS ASPERRIMA
346	FICUS INFESTORIA-ROXB
347	FICUS GIBBOSA-BLUME
348	FICUS GLOMERATA-ROXB
349	FICUS PALMATA-FORSK
350	SENSITIVE PLANT
351	JABOL/BLACK PALM

352	ROSE APPLE
353	EUPHORBIA ANTIQUORUM-LINN
354	MILK BUSH
355	HORBIA ANTIQUORUM-LINN
356	EUPHORBIA THYMIFOLA-BURM
357	EURYALE FEROX
358	AYAPPANATREE
359	WILD SAGE
360	LAPORTEA CREMULATA
361	LUFFA ACUTANGULA
362	LUFFA ECHINATA
363	LAGARSTROEMIA FLOS
364	LAUNAEA PINNATIFIDA-CASS
365	CHIKLING VECH
366	HENNADYE/KAM FIRE
367	LIMONIA ACIDISSIMA-LIN
368	LIPPIA NODI FLORA-RICHARD
369	LEEAE SAMBUCINA-WILLD
370	WOOD HEAD NIDIA
371	COMMON TALO LORAL
372	WRIGHTIA TINCTORIA
373	LIMNOPHILA GRATIODES-BR
374	LEUCAS ASERA-SPERENG
375	LEUCAENA GLAUCA-BENTH
376	LEPIDIUM SATIVUM-LINN
377	LOBELIA NICOTIANAEOFOLIA
378	LINUM USITATISSIMUM
379	VALLARIS HEYNEI
380	VANDA SPATHULATA
381	VANDA ROXBURGHII

382	WALSURA PISCIDA
383	INDIAN KOPPALTREE
384	VINCA PUCILLA MURR
385	RED PERIVINGLE
386	KAWPI
387	WINTER CHERRY
388	WEDELIA CALENDULACEAE
389	VERNONIA CINEREA-LEES
390	WOODFORDIA FLORIBUNDA-SALISB
391	INDIAN WILD WINE
392	FOLKS GRAPE
393	VITIS PEDATA-VAHIL
394	VITIS LATIFOLIA
395	GRAPES
396	INDIAN PRIWET
397	VERBENESI
398	GREEN DAMAN
399	SAL TREE
400	HONEY TREE
401	WILD SUGAR CANE
402	SUGAR CANE
403	SANDAL TREE
404	SACCOLOBIMUM PAPPILLOSUN
405	SOAP NUT TREE
406	CLUSTER BEAN
407	ZANONIA INDICA
408	CLOCKER BUR
409	SAPIUM INDICUM
410	VILLO
411	BAW STRING



412	TOOTH ACHE TREE
413	MOON CREEPER
414	SARCOSTIGMA KLENII
415	ORANGE
416	BITTER ORANGE
417	BERGAMOTO ORANGE
418	LEMON BASIL
419	ADOMS APPLE
420	ACID LIME
421	PARADISE APPLE
422	SYNANTHERIAS
423	CHINESE DATE
424	JACKED JUJUB
425	RAAMSENI
426	GOVA TREE
427	BITTER CUCUMBER
428	WATERMILON
429	TRUE SYNAMON
430	ZINGIBER CASSUMUNAR
431	GINGER
432	ZINGIBER ZERUMEBUT
433	CAESALPINIA NUGA
434	FEVER NUT
435	SUPPAN WOOD
436	SCINDAPUS OFFICIANALIS
437	VELVET LEAF
438	BENGAL GRAM
439	INDIAN CORN
440	SEDAR
441	CELSIA COROMANDELIANA

442	WHITE COCK COMP
443	BLACK OIL TREE
444	CEPHALANDRA INDICA
445	ZEHNERIA UMBELLATA
446	MARKETING NUT TREE
447	SESBANIA OEGYPTICA
448	AGATHI
449	COCKS COMP
450	MANGROOVE
451	SNEEZVERT
452	GINGALI PLANT
453	CERBERA ODOLLAM
454	SOLANAM INDICUM
455	SOLANAM FEROX
456	SOLANAM MELONGENA
457	SOLANAM TRILOBATUM
458	SOLANAM NIGRUM
459	SOLANAM XANTHOCARPUM
460	SONNERATIA CESEOLARIS
461	SOYMIDA FEBRIFUGA
462	PSORALIA CORYLIFOLIA
463	SIDA CARPINFOLIA
464	SCOUNTRY MALLO
465	SIDA SPINOSA
466	SIDA HUMILIS
467	SIDA
468	RHOMBI FOLIA
469	CYNODON DACTYLON
470	CYNMETRA RAMI FLORA
471	CYPERUS SCARIUSUS

472	CYPERUS ROTUNDUS
473	XYRIS INDICA
474	SCIRPUS GROSSUS
475	SPONDIAS MANGIFERA
476	SPILANTHES ACMILLA
477	SPINACIA OLERACEA
478	SPERMA COCE HISPIDA
479	SPHAE RANTHUS INDICUS
480	SMILAX ZEYLANICA
481	STEREOSPERMUM CHELO
482	STEROSPERMUM
483	STEREOSPERMUM SUAVEOLENS
484	STERCULIA URENS
485	STERCULIA FOETIDA
486	STRYCHNOS POTATORUM
487	STRYCHNS COLUBRINA
488	STERYCHNOS NUXVOMICA
489	STREBLUS ASPER
490	HARDWICKA PINNATA
491	HYDNOCRARPUS WIGHTINA
492	HIPTAGE MADABLOTA
493	HUGONIA MYSTAX
494	HOLARRHENA
495	HOLOSTEMMA ANNULARIS
496	HOLO PTELEA INTEGRI FOLIA
497	HEMIDESMUS-INDICUS
498	HELIOTROPIUM INDICUM
499	HELICTERES ISORA
500	HERPESTIS MONNIERA
501	HYDROCOTYLE ASIATICA

502	HYDROLEA ZEYLANICA
503	HIBISCUSABELMOSCHUS
504	HIBISCUS ESCULENTUS
505	HIBISCS CANNABINUS
506	HIBISCS TILIACECUS
507	HIBISCS SUBARIFFA
508	HIBISCS ROSASINENSIS
509	HYMENODCTYON EXCELSUM
510	RUNGIA PARVIFLORA
511	RAPHIDOPHORA PERTUSA
512	RANDIA DUMETORUM
513	RAVWOLFIA SERPENTINA
514	RICINUS COMMUNIS
515	RHINACANTHUS COMMUNIS
516	RIVEA ORANTA
517	RUBIA CORDIFOLIA
518	RUELLIA PROSTRATA
519	ROSA CENTIFOLIA
520	ROSA DAMASCENA
521	RUTA GRAVEOLENS
522	RHIZOPHORA MUCRONATA
523	ALOE VERA WRIGHTIA TOMENTOSA
524	ROUREA SANTALODIES
525	RAPHIDOPHORA PERTUSA
526	RANDIA DUMETORUM
527	RAVWOLFIA SERPENTINA
528	RICINUS COMMUNIS
529	RHINACANTHUS COMMUNIS
530	RIVEA ORANTA
531	RUBIA CORDIFOLIA

532	RUELLIA PROSTRATA
533	ROSA CENTIFOLIA
534	ROSA DAMASCENA
535	RUTA GRAVEOLENS
536	RHIZOPHORA MUCRONATA
537	ALOE VERA WRIGHTIA TOMENTOSA
538	ROUREA SANTALODIES
539	WRIGHTIA TOMENTOSA
540	OCIMUM BASILICUM
541	GOTU KOLA
542	BASIL
543	THYME
544	ROSEMARY
545	FENUGREEK/ METHI
546	PEPPERMINT
547	LEMON BALM
548	GLOBE ARTICHOKE
549	ASHWANGANDHE
550	OCIMUM CANNUM
551	BRYOPHYLLUM/ PANFUTI
552	RUI
553	COSTUS
554	KHUN
555	VITEX NEGUNDO
556	SAGARGOTA/BOUNDUC NUT
557	STEVIA
558	MARSH MELLOW
559	GREAT BURDOCK
560	CHINSE YUM
561	SIBERIAN GINSENG

562	SEA BUCKTHORN
563	TEA TREE
564	THE GREAT YELLO GENTIAN
565	ASHOK
566	BAEL / BILVA
567	BHUMI AMLA
568	BRAHMI
569	CHIRATA
570	GUDMAR
571	GULUCHI /GILOE
572	CALIHARI / PANCHANGULIA GLORILILY
573	KALMEGH/BHUI NEEM
574	LONG PEEPER/PIPPALI
575	MAKOI/ KAKAMACHI
576	PASHANBHEDA
577	SANDAL WOOD
578	SARPA GANDHA
579	SATAVARI
580	SENNA
581	VAI VIDANKA
582	PIPPERMINT
583	HENNA/MEHDI
584	SADA BAHAR
585	VRINGRAI
586	SNEET CHITRAK
587	KOCHILA
588	HARIDA
589	BAHADA
590	GOKHUR
591	ANANTAMOOOL //SARIVA

592	BACH
593	VASA
594	NAGESWAR
595	BENACHAR
596	MANDUKPARNI
597	KAINCHA
598	DALEHINI
599	WILD CELERY
600	HOLLY BAZIL
601	CHRYSANTHEMUM
602	CALIFORNIA POPPY
603	SUN FLOWER
604	CARNATION FLOWER
605	DANDELIN
606	HONEYSUCKLE
607	COMMON DAISY
608	WATER LILLY
609	URAD BEAN
610	BUTERFLY WEED
611	KURAI
612	KANTAKARI / AKRANTIPERENNIAL
613	BILBERRY
614	BETELNEET
615	BIRTHNORT
616	BITTER ORANGE
617	GINKGO
618	BLACK COHOSH/FAIRNY CANDLE
619	CAT'SCLAW
620	GREATER CELANDINE
621	LESSER CELANDINE

622	CHAMOMILE
623	CHAPARRAL
624	CHRYSANTHEMUM
625	GRAVIOK
626	GREEN TEA
627	COCL LEAVES
628	COLTSFOOT
629	COMFRENCY
630	COUNTRY MALLON
631	DANDELION
632	DEVIL'S CLAN
633	ECHINACEL
634	GROUNDSEL
635	EPHEDRA
636	EVENING PRIMROSE OIL
637	EYEBRIGHT
638	FENNEL
639	FEVER FEN
640	FOX GLOVE
641	GERMAN CHAMOMILE
642	GERMANDER
643	GOLDENSEAL
644	GROUNDSEL
645	HAWTHORA
646	HENBANCE
647	HORNY GOAT WEED
648	HORSE CHESTNEET
649	HORSETAIL
650	JIMSON WEED
651	KAVA

652	LICORICE
653	LILY OF THE VALLEY
654	LOBELIA
655	MADDER ROOT
656	MILK THISTLE
657	MISTTE TOE
658	MUGWORT
659	NEEM
660	OLENDER
661	OREGANO
662	PARSLEY
663	PENNYROYAL
664	RED CLOVER
665	ROMAN CHAMOILE
666	SAGE
667	SASSAFRAS
668	SPINACH
669	AQUIL
670	STEVIA
671	HYPERICUM PER FORATUM/VALLTHEROSA
672	TURMERIC – 3 TYPES(BLACK,KASTHURI AND KARI)
673	VALERIAN VENUS FLY TRAP WINTERGREEN
674	WORMWOOD
675	WALNUT(BLACK WALNUT)
676	NAGAVALLY
677	WITHANIA ROOT
678	BISHOPS WEED
679	BUR WEED
680	AMARVEL (CASSY FILIMORMIS LINN)
681	GARDEN CRESS

682	EAST INDIAN SCREW TREE
683	LIQUORICE
684	CINNAMON
685	SPOGEL
686	RED WOOD FIG TREE
687	ADRILLAL
688	INGUDC
689	BAY -BERRY
690	CATECHY TREE
691	BABHUL
692	BONDUC TREE
693	OPIUM POPPY
694	WILD ORANGE TREE
695	JERUSALEM OAK
696	PURGING NUT
697	WILD NUT MUNG
698	DELVILS DUNG
699	BENGAL CURRENT
700	BABCHI
701	CLOVES
702	CHIRETTA PLANT
703	SAFFRON PLANT
704	MALABAR TAMARIND
705	INDIAN ACALYPHA
706	HENBANE
707	PHARBIT'S SEED
708	THATCH SCREW PIRE
709	CESLUS
710	INDIAN MAHANI
711	COSLUS

712	CHIRPINE
713	SKBEERANL
714	INDIAN SENNA
715	CHINA ROOT
716	SAFFRON
717	SHOE FLOWER PLANT
718	LINSEED
719	MUSK-ROOT PLANT
720	COMMON YEW
721	FOX GLOVE
722	CAPER
723	NEPHRO ROOT
724	HEPATO ROOT
725	PULMO ROOT
726	CARDIO ROOT
727	CYTO ROOT
728	CYTO ROOT
729	RHINO ROOT
730	NASO ROOT
731	PETEL LEAF
732	THULASI PETEL
733	NORMAL PETEL
734	KAVA
735	ACORUS CALAMUS
736	MANDRAKE
737	RUBIA CORDIFOLIA
738	FENUGREEK
739	NIRMALI
740	KARAYA
741	INDIAN GENTAIN

742	DEODAR
743	FAGONIA
744	EAST INDIAN ROSE BAY
745	INDIAN SQUIL
746	SEBASTEN PLUM
747	IRON WOOD TREE
748	WHITE EMETIC NUT
749	MARVEL OF PERU SWDUROOPINI
750	CORAL JASMOINE
751	SOAP NUT TREE
752	PAPADA
753	PASHANA PHEDI
754	PERFUMED CHERRY
755	IPOMIYA
756	NALITHA
757	GUM-IAC TREE
758	PUTRANJIVA
759	ALMOND
760	HALDU
761	YELLOE NAIL-DYE PLANT
762	TREE OF HEAVAN
763	JANGLI BADAM
764	AVARAM
765	ROSEMARY
766	TEE TREE
767	LEMON GRASS
768	LOTUS
769	MEDICINAL COLEUS
770	PERUNANNARI
771	INDIAN SARSPARILLA



772	PALMOROSA
773	VETIVER
774	VALAK
775	JATROPHA
776	NUT GRASS
777	SWORD BEEN
778	INDIAN SCREW TREE
779	COMMON WIRE WEED
780	AKASGADDAL
781	ARJUNA TREE
782	CRETACVA
783	SALACIA
784	KUTKI
785	AKARKARA
786	ARAKKU
787	PUTRANJIVA
788	TREE TURMERIC
789	MELIA
790	SWEET FLAG
791	INDIAN HEDACHE TREE
792	LODHRA
793	ETTI
794	DEV DAR
795	CLOVE BASIL
796	DHAVANAM
797	SWEET WORM WOOD
798	CHAMOMILE
799	NIGHT JASMINE
800	VALERIAN
801	CLARY SAGE

802	MUSK DANA
803	CLEARING NUT TREE
804	GALL OAK
805	SOAP NUT TREE
806	GLORY LILY
807	PERIWINKLE
808	ISABGOL
809	KALMEGH
810	BLACK NIGHT SHADE
811	THAI NIGHT SHADE
812	BALLON PLANT
813	COWHEDGE WHITE
814	COWHEDGE BLACK
815	SOUR SOP
816	NONI
817	SAPPAN WOOD
818	GARDEN CRESS
819	VISHNUGRANTHI
820	STERIOD-BEARNG SOLAMEM
821	BAEL
822	DATURE/DATURE METAL
823	SICKLE SENNA/CASSIA TORA
824	CHINESE SENNA
825	BHUMALAKI
826	SATAVARI
827	BISHOP'S WEED/AMMI MAJUS
828	AJOWAN/TRACHYSPERMUM AMMI
829	BLACK CUMIN/NIGELLA STAVIA
830	ANNATTO BIXA
831	BLACK HENNA/INDIGOFERA TINCTORIA

832	CORAL BEAD VINE/ABRUS PRECATORICES
833	SHOWY ROSERY PEA
834	PUNCTURE VINE
835	COMMOR WIRE WEED
836	AGATHI
837	NOTCHI/VITEX TRIFOLIA
838	RED SORREL
839	APARAJITA
840	TOUCH ME NOTPLANT/MIMOSA PUDIA
841	CHOTA CHIRAYATA
842	KANGAROO APPLE
843	PUTRANJIVA
844	HERACLEUM
845	CHITRAK
846	BITTER OLEANDER
847	BLACK OIL PLEANT
848	SILYBUM
849	SACRED BASIL
850	SWEET BASIL
851	CAMPHOR BASIL
852	CLOVE BASIL
853	DHAVANAM
854	SWEET WORM WOOD
855	CHAMOMILE
856	NIGHT JASMINE
857	VALERIAN
858	CLARY SAGE
859	MUSK DANA
860	VETIVER
861	PALMAROSA

862	LEMON GRASS
863	TOOTH BRESH TREE
864	FENUGREEK
865	COFFEE SENNA
866	BLACKMUSTARD
867	INDIAN MUSTARD
868	HELLEBORE PLANT
869	CARA WAY
870	QUASSIA INDICA
871	SUGER CANE
872	PURPLE FLEABANE
873	INDIAN BORAGE
874	WORM SEED
875	PUSLEY
876	PURPLE BAUHINIA
877	KONEIG
878	INDIAN NUTSHADE
879	PURPLE LIPPA
880	CUMIN PLANT
881	GHOKRU PLANT
882	STAR ANISE
883	INDIAN VALERIAN
884	INDIAN ROCK-FOIL
885	PEETHA PHALA
886	SPEARMINT
887	SWEET FENNEL
888	BARLEY PLANT
889	GARDEN NIGHT SHADE
890	BOSTRIC HUMP
891	VELVET LEAF

892	MULBERRY
893	GIANT TARO
894	RACABA
895	COMMON MYRRH TREE
896	HEADACHE TREE
897	PRICKLY AMARNATH
898	POORNABHEDA
899	POORNABEEJA
900	CHITHRA PURNI
901	KUNTHALI
902	CUSCUS GRASS
903	SWARNALATHA
904	INDIAN ACONILE
905	INDIAN SPINACH
906	TAIL PEPPER
907	SWEETHA MUSALI
908	SREEMATHI
909	DINESAVALLY
910	INDEEVARA
911	DILL
912	GARDEN RUE
913	SUNFLOWER
914	INDIAN WINTER GREEN
915	IPOMOEA
916	CHIRETTA PLANT
917	INDIAN ACALYPHA
918	HENBANE
919	INDIAN VALERIAN
920	FOX GLOVE
921	CAPER

922	NIRMALI
923	KARAYA
924	GUM- LAC TREE
925	CURRY LEAF
926	WILD GINGER
927	ARROW ROOT
928	YELLOW ARROW ROOT
929	GINGER MANGO
930	HIMALAYAN MAYAPPLE
931	SHAMA
932	RUMBOOTAN
933	PINEER CHAMBA
934	CHAMBA
935	PASSION FRUIT-
936	PAPPAYA
937	GOOSEBERRY
938	MULBERRY
939	SAPPOTA
940	GUVA
941	EGG FRUIT
942	MANGOSTINE
943	AMPAZHAM
944	STREWBERRY
945	GRAPES
946	PINAPLE
947	LEMON
948	FRUIT LEMON
949	MANGO(10 TYPES)
950	POMAEGRANATE
951	MULLATHA

952	ATHI
953	JACKFRUIT
954	BEACH
955	BANANA
956	BLACK BERRY
957	HONEY DEW
958	AVOCADO
959	KEWI
960	BIGNAY
961	BILBERRY
962	RAMBUTAN
963	ORANGE
964	LYCHEE
965	DRAGAN FRUITSAGUARO
966	CASHEWNUTS
967	PEARS
968	THINA
969	SOURSOP
970	CARROT
971	BEANS
972	CAULI FLOWER
973	CUCUMBER
974	COCOUNT TREE
975	EGG PLANT
976	GREEN PEPPER
977	MUSHROOM
978	ONION
979	POTATO
980	RED PEPPER
981	PUMKIN

982	CHILLY
983	TOMATO
984	RADESH
985	BEETROOT
986	RADISH
987	SWEET POTATO
988	LEEK
989	CABBAGE
990	GREEN BEAN
991	LADIES FINGER
992	DRUMSTICK
993	BITTTERGAURD
994	BRINJAL
995	SNAKE GOURD
996	FRENCH BEANS
997	PURUVIAN GROUND CHERRY
998	RIDGE GOURD
999	WHITE BRINJAL
1000	CORIANDER LEAVES

# CHAPTER - 3

## NEED OF THE PROJECT



The tribal population is scattered across the country, is differently placed with respect to the politico – administrative structures existing in the country. Where they are a numerical minority, they are a part of the general administrative structure of the country, although certain rights have accrued to Scheduled Tribes across the country through reservations in educational institutions and government employment. However, where they are numerically dominant, two distinct administrative arrangements have been provided for them in the constitution in the form of the Fifth and Sixth Schedules. The Sixth Schedule areas are some of the areas which were „excluded“ until the Government of India Act, 1935 in the erstwhile Assam and other tribes – dominant areas which become separate states. The Fifth Schedule aimed at providing protections to the tribal population through separate laws for the Scheduled areas, including a special role for the Governor and the institution of Tribal Advisory Council. The provisions of the Fifth Schedule have seen further legal and administrative reinforcement in the form of provisions of Panchayats (Extension to Scheduled Areas) Act, 1996. Despite these special provisions, tribes are among the poorest and most marginalized sections of Indian society. Although numerically only about 8.6 percent of the total population was below the poverty line in 1993 -94. In the same year, 63.7 percent of the tribal people were living below the poverty line, almost 20% than the rest of the country.

# KERALA TRIBAL SCENARIO

## ECONOMIC STATUS

Traditionally Tribes in India pursued an economy which was closer to nature, and used indigenous technology. This is reflected in their dependence on forest and other natural resources available in their habitat. While some tribal communities have adopted a way of life, similar to the neighbouring non-tribal communities, there are other tribal groups, whose livelihoods are characterized by (a) Forest-based livelihoods, (b) pre-agriculture level of technology, (c) a stagnant or declining population (d) extremely low literacy and (E) a subsistence level of economy. A variety of economic activities were pursued by the tribes of India, depending on the availability of resources in their respective habitats. And the main way of income of the Tribal people in India are:

- Hunting
- Hill – cultivation
- Plain agriculture
- Simple artisan
- Pastoral and cattle – herding
- Folk – artists and
- Agriculture and non – agriculture labour.



# EDUCATION

Education is an important aspect of development in the present scenario. Everybody is competing intellectually. Everybody is using modern ideas and technologies. Less time and more work is the new concept of occupation. While in the modern world tribes are being marginalized. India has adopted a foreign way of education. Our education system has

<b>Literacy rate of SC, ST and General population (1991 - 2011)</b>			
<b>Year</b>	<b>ST</b>	<b>SC</b>	<b>General</b>
<b>1991</b>	29.6	37.41	52.21
<b>2001</b>	47.1	54.69	64.84
<b>2011</b>	58.96	66.07	72.99

developed during British Colonial period, so the language and syllabuses are closely related to them. From that time tribal people have very less contact with British people and they reside in the forest by following their rules and culture. Only a minority of the tribes in the northeast and middle India

have adopted foreign culture. Which may not wrong or neither right, but it is one of the reasons why Tribal people are backward in education while comparing with the Non-Tribal communities in India. Education is necessary, but in Tribal culture they give less importance to education they don't send their children to schools and teach them properly, we can hardly find Tribal men/women who have completed higher studies. School dropouts are a very serious problem among the tribal children. The dropout rate is very high among the community across India. There are multiple reasons for school dropouts; distance from the school, lack interest in education, difficulty in learning, the problem of language, child labour, child marriage and compulsion to take care of younger children when the mother gives birth to new baby etc. are reasons of school dropouts among tribal children. We can bring them into the mainstream of the society by giving them proper education. There are multiple reasons for the educational backwardness of the tribal people. They don't have proper shelter, clothing, food and still living in poverty, then how they can think of education. We need to start from the basic. The governments of the Independence period have been working for the development of Tribal people by providing constitutional remedies and reservations for education and job, providing free education to the ST children including free books, uniform and meal at the lunch. Even though we can notice a minimal development among the tribal communities.



# ENVIRONMENT

Tribal people are the guardians of forest and forest resources. They have been living in forest from a very long period. That is why they are known as „*Adivasi*’. This means the old natives of the land. Tribal culture is closely related to the forest. They find their income and food grains from the forest without destroying a single piece of tree or forest products. Their gods and festivals are also related to the forest, they worship animals and trees as their gods.



In India, majority of the tribes are living in the forest regions. 9 states cover around 80% of total tribal population in the country. Tribes, knows that forest is their means and live so it is their responsibility to protect the forest. For few decades back tribes don’t even know about electricity the only light known to them was sun and the other one was from fire, even today, many of the tribal hamlets don’t have electricity facility, water facility, and proper shelter. The innocence of tribal people has exploited by non-tribal people. They migrate to the forest areas for only the means to exploit the forest and earn money. It results in all over India. Our forest resources have decreased, large scale deforestation have taken place and the whole environment began to change. As a result global warming takes place. Many of the rare species in our forest have vanished due to it.

We should seriously think about global warming and the acts of non – tribal people. Tribes do not use Air Conditioner, refrigerator, Cars, Motor Vehicles and other electronic devices on a large scale. Global warming is taking place because of the excessive use electronic devices, Refrigerator, Air Conditioner and Motor vehicles. But tribes are the community most affected by global warming and the change in environment. They have lost their food pattern, lost their health, Lost their economy due to deforestation etc. Non - STs can adjust with Global warming by staying in Air conditioned houses, drinking cool drinks, travelling Cars etc. But what about the Tribes who are living in the forest Do they have a proper house to be safe from the Global Warming? No. they are really struggling to live and also our animals that all are living in the forest. Non – tribal people are exploiting the nature and Tribes are most affected by it

seen that after few years it is also perished due to bad construction. The problem is that the government officers do not give much importance to the problem of tribal people. They focus on how to exploit the tribes and how to do corruption in tribal development funds. If the funds for tribal housing, irrigation and sanitation have properly spent for it, there will not be any tribal family who do not have own home, lack of water facility, nutrition deficiency and other health problems.

India occupies a greater part of South Asia with 29 states. Each state has power within. The country ranks 2<sup>nd</sup> in population after china. India has a very long back history, Indus valley civilization is very popular among the world countries. India was a colony of British before 1947. This made positive and negative impacts on Indian development. There are still debates running on this topic. The first foreigner came to India was Vasco Da Gama. The Portuguese explorers who reached India in 1498 by his ship Sao Gabriel. Later Gama many foreigners came to India for business purpose. India was a hub of spices they export Indian spices to their countries.

The tribal areas were the last to come under the British power because of their difficult terrain and inaccessibility. They adopted the approach of lightly administering these areas. The normal administration of the provinces, in the tribal areas were located, was not extended to them, in many regions single line administration was established where all authority was vested in one individual who was honoured and there was judicious intervention only when it considered inevitable.

In fact the isolation of tribal communities began with the enactment of the government of India act of 1870 under which a few tracts were specified as “ scheduled tracts” in certain provinces such as Assam, Central provinces, Bihar, Orissa, Madras, Bengal, Lakshadweep. In 1874 the scheduled district Act was passed which exempted. The scheduled areas form the jurisdiction of civil administration and were placed under the exclusive control of collectors of the districts who were also designated as the agent of the governor.

The tribal development is a very complicated term which has been discussing over the last six decades. The governments of the state, the government in the central, Professionals, Researchers and people in the local administrative bodies are still discussing about the term tribal development. The governments and Private corporate are spending large amount of money for the development of indigenous people. But lack of proper studies in the needs of Tribal people, corruption in the administrative system and by the political leaders still kept tribes away from development. Many people who engaged in tribal development activities believes that the term development means Urbanization or changing the lifestyle, culture of tribal people and to bring them into the modern world. The wrong concept about the development makes Tribal development more complicated. Acculturation and urbanization are the main threats of Tribal development. The tribal traditions, arts, culture and lifestyle are traditional we don't want to change it all in the name of development, but the development should be sustainable providing them equal and unbiased opportunities for development as the general population. Make sure that they are getting constitutional remedies they should be free from exploitation.

We can't generalize the tribes living in different Indian states, the Tribes living in different states and different regions have their own culture, tradition, language, food style and dressing style. Each tribal community has their own style of living so the generalization is a complicated thing, but one thing is sure that the health, education and infrastructure facilities of Indian tribes are almost similar in all regions. They are living under the poverty line, unemployment, poverty, low literacy rate, infant mortality and diseases are common among them, but the intensity may vary from one Tribal community to the other.

# TRIBAL EDUCATION

Tribes are far behind the national average literacy rate. While comparing with the national total population and literacy rate we can understand that where the tribes are still standing in literacy. The total population of the country is 123.42 crores (2016) and the national average literacy rate is 74.04%. Kerala is the top most state in literacy in India with a literacy rate of 93.91% and Bihar having the



least literacy rate of 61.80%. Bihar falls behind the National average literacy rate. Whereas the Tribal population in the Country is only 10.1 crores, even though they fall behind the literacy rate of the least literate state Bihar. The average literacy rate of Tribes in India is 58.96 (2011). The above statistics shows that the problem of tribal education. Low literacy rate is being the one of the fundamental cause of all problems of Tribal people in India. There are a number of reasons for the low literacy rate of Tribal people in India. The problem of school dropouts is very high among the Indian tribal communities, lack of interest in education, lack of support from the family unawareness about the importance of education, child labour, poverty etc. are leading causes of school dropout among Tribal children. The literacy rate of women in Tribal community is very low. In almost all the states, tribal women fall behind the literacy state of men. Many women never attend school. The elder female child has the responsibility to take care of the younger children when the mother is pregnant for the next baby so the female children don't go to school they have an earlier responsibility to shoulder the household activities. Child marriage is also another reason for the low literacy rate among tribal women. Child marriage is also a common factor among the tribal communities.

# TRIBAL HEALTH

The health is very complex matter among the tribes in India. Diseases, malnutrition, Infant Mortality, Maternal Mortality, low life expectancy, Communicable diseases and chronic diseases are so common among them. There are governmental

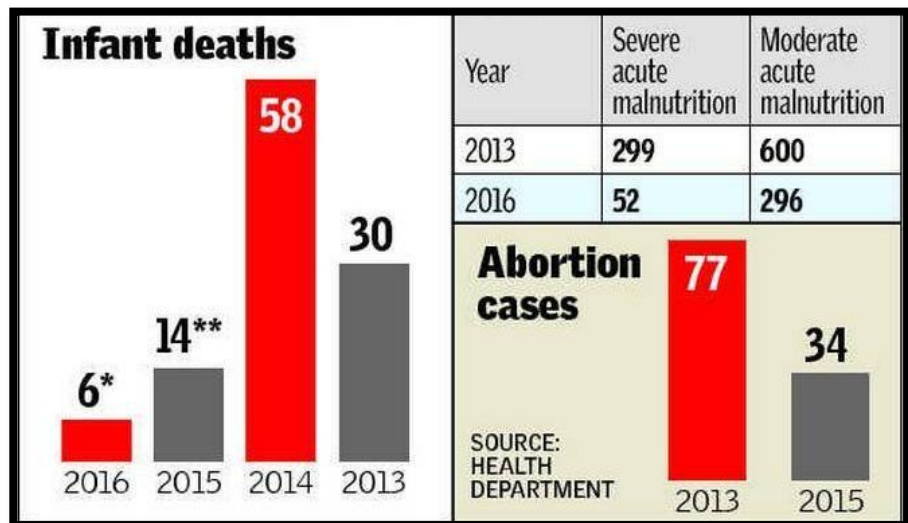
and non – governmental efforts to improve the health status of Tribal people in India, Even though the problem remains unchanged. Tribal community in India facing the problem of lack of accessibility to the primary health services. Generally Tribes are living near or inside the forests so they have to travel a long distance to reach a hospital or health care centre, there are health volunteers in India but in the case of Tribal people health volunteers can't reach to the tribal hamlets which is located at the forest areas and there will be a minimum transport facility to the tribal hamlets. In the case of delivery majority of the Tribal people prefer home delivery, they were practicing home delivery for a very long back period but now a days there is no such expertise traditional

persons to practice home delivery which will resulting in the death of the infant or the mother or it will lead to physical problem to the child. There are so many awareness programmes to improve the tribal health status, in the state Kerala

government provide free checkup, medicinal service and Ambulance facility to Tribal people even though many of them refuse for medical treatment.

## Major Tribal Health Problems

- Poverty
- Tuberculosis
- Sickle Cell Anaemia
- Vector Borne Disease
- Infant Mortality
- Maternal Mortality
- Life Style Diseases
- Leprosy
- Malaria
- Nutrition Deficiency



Poverty is the leading cause of health problem among tribal people in India. Tribal people from their origin were lived in the forests and forest areas by depending on the forest products. Due to deforestation and new forest policies tribes lost their access to forest products which imbalances their living pattern. Climate change and globalization pulled the tribes into extreme poverty. Alcoholism and drug abuse is the other major problem of the tribal community which lead them into variety of diseases like TB, Cancer etc. and these substance abuse results in high rates of poverty among them. The studies show that many of the tribal people start drinks at an age of 13 or 14 in general community it is 17-18 years old. The substance abuse among the children is also results in school dropouts. As per the studies, peer group influence is the major reason of substance abuse among the tribal children.

## **TRIBAL ECONOMIC STATUS**

Employed youth and population is the asset of every country. Each person should be able to contribute to the development of his/her nation. In India the central and state governments are very concern about the employment of its people. Even though there are many people who remain unemployed. The scheduled casts and Scheduled Tribes are the most vulnerable sections of the country. They are still away from development activities and government programmes. They don't have proper access to the governmental development programmes and they are not well aware about the programmes and policies of the central and state government.

**Savings** – Usually Tribal people don't have a habit of saving money for tomorrow. They earn money for today and spend the whole money today. Alcoholism and other substance abuse is also a reason of spending money. In fact there is high discrimination in work place among Tribal population and General population. Tribal people don't get equal wage for equal work that a general men do. Tribal people are always getting fewer wages than General population in all the private sector.

**Government Jobs** – There is Constitutional remedies for Tribal people in India. Tribal population in India is getting reservation in all the state and central government jobs. But still the numbers of Tribal employees in central and state government jobs are very less. Many posts remain vacant due to suitable candidate. There are multiple reasons for this the basic cause is lack of education and the other major causes are lack of awareness about their reservations and about government jobs, lack of internet access etc.

**Professionals** – We can't see a large number of IT professional or professional employees from tribal communities. It is very difficult to find professional employees from Tribal communities. It is very difficult to find professional employees from Tribal communities. Engineers, Doctors, and other professional jobs are still very away from tribal communities in India.

**Agriculture** – Agriculture is the major income for tribal people in India. But in fact, many of the tribal people don't have own land. The tribes who are having own lands are doing agriculture and other farming activities.

And the threat behind tribal agriculture is the majority of them are not using any modern technology in their agriculture. The lack of access to modern technology and modern equipments results in low production and high manual labour, it takes long time and the cost of agriculture is also high. If they have easy access and knowledge to use the modern technology and agriculture, they can produce more and save time and manual labour.

**Art & Craft** – A small number of tribal people in India follow traditional Art & Craft system. India has a very long back history in art & craft. The system of Art & Craft developed in India even from the Indus valley civilization period. In modern days Indian art & craft have a very good market value in foreign markets and many people from abroad came to India to buy our craft products. The central and state governments promote Art & Craft in India by providing them financial assistance and other needed services. In case of Tribal Art & Craft, they are very ethnic and speaks volume about the country's heritage.

**Hunting & Fishing** – The Indian union has two Island population Andaman & Nicobar, Lakshadweep Islands. These two islands have a good number of tribal population. In the earlier period they don't have any contact with the outside world. The mainly way of their livelihood was fishing from the sea, they use traditional methods to fish. Lakshadweep has a tribal population of 94%, they also follow the same. And another tribal communities living in forest were mainly focused on Hunting of wild animals. They don't sell animals, they hunt animals for their food. But now a day our forest policy has changed and the Tribes don't have much access to the forest products. That affects the proper living of tribal people who depend on forest products for their livelihood. Because of these reasons those tribes shifted their tradition of hunting to manual labour and some other activities which seriously affected in their lifestyle and health.

Tribes in India generally live in the forest or near to forest by depending forest for their livelihood. They are a group of indigenous people having a common culture, tradition, language and way of lifestyle. There are more than 700 Tribal communities in India. A tribal community may vary from other tribal community living in very next to them in all aspects like language, food, dressing, culture, beliefs, etc. Majority of the Indian tribes are Hindus by religion even though there are tribes belong to other religions also. Tribal communities have a informal social control themselves. Like our "*Gramasabha*" they gather under a tree or a particular place under the leadership of a senior person in their community to take each and every decision regarding their community issues. The decision of the majority will be finalized. Actually tribes in India are following a very long back democratic system. Tribes are forest dwellers, they have been living in the forest since their origin and they collect food from the forest in the early period. But now a day their culture, tradition, life style, food pattern, dressing style everything has changed due to the migration of non – tribals to tribal areas. They had very limited contact with the outside world because of lack of proper transport facilities to the tribal hamlets. But due to the emergence of technology and devices non – tribal people came to know about the tribal areas and about the products in the forest. Indian forests consists a large number of medicinal plants which only the indigenous people have the knowledge about it. The non – tribal people migrated to the tribal areas on a focus on exploiting the forest products and earn money from it. The outside peoples easily influence the tribes and exploit them without any difficulty Indian tribal people were illiterate and unaware about such malpractices. They mortgage the land of tribal people and the majority of the Indian Indigenous people become landless. The interventions of outside people to the tribal areas destroy tribal culture, security of living and standard of living also. There was acculturation of modern culture with Tribal culture. The use of substance abuse has introduced to the tribes by the non – tribal people which lead the tribes to a very big disaster till today they could not recover from it.



# PROJECT LOCATION

Attappady is a backward revenue block of Palakkad district of Kerala state. It has an area of 745 sq.km and encompasses three panchayats Agali, Pudur and Sholayur. It has a population of 66,171 (2001 Census). Tribes form almost half of the population (27,121) and are represented in three sects called Irula, Muduga and Kurumba. They live in hamlets in and around the hills of Attappady. There are 188 such tribal hamlets.

The non-tribal population comprises of settlers from Kerala and Tamilnadu. Both the tribes and non tribes pursue agriculture as their means of living. They cultivate a wide variety of crops from spices to pulses and vegetables. The earnings from agriculture are inconsistent, due to the vagaries of nature like drought, flash floods, heavy winds and devastation by wild animals.

The tribes engage in paid labour because a bulk of their land holdings is not cultivable. Those living in the remote villages get very less work (about 10 man days per month) compared to those near the central areas. Government schemes like NREGA and a government project called Attappady Wasteland Comprehensive Environment Conservation Project implemented by Attappady Hills Area Development Society (AHADS) have marginally improved their employment opportunities and earnings.

The traditional tribal life is rich with a strong community bonding, family networks and sense of social responsibility. Dance, music and festivals are inherent components of tribal culture here. The interaction with the modern world has led to erosion of many of these virtues which have exposed the tribes to many hazards including mental illness.

Though Kerala has a high literacy and high standards of public health, people of Attappady remain very backward on both counts, especially the tribal population. The literacy rate is less than 50% and school dropout rates are high. Literacy and education among girls is also very low.

Attappady is one of the east sloping region in the Western Ghats of Kerala. Great variation in rainfall is met within the area. Three geographical units comprising three ecological units can be identified in the study area. The population in Attappady consists of tribals and settlers. The tribal communities residing in the area are Kurumbas, Mudugas and Irulas. Of the 142 Tribal hamlets in the region, 104 belong to Irulas, 16 to Kurumbas, 20 to Mudugas and 2 hamlets contain a mixture of Kurumbas and Mudugas. These hamlets are sprinkled over three panchayats of Agali (52), Pudur (53) and Sholayur (37). The settler population consists of migrants from Kerala and Tamil Nadu. Although the three ethnic communities residing in Attappady belong to the broad group of Dravidian, there is a marginal variation in their social relation, custom, culture and level of economic development. Traditionally, each hamlet was

self- sufficient and self-reliant, both politically and economically, and was ruled by a council of their representatives, headed by Moopan. The property, mainly land was owned by the community and distributed by head of the hamlets. The formation of tribal block and then ITDP was an important event in Attappady. The decisions in ITDP are taken for and on behalf of tribals by plainsmen located at far away places. Introduction of political ideologies by different political parties and modern administration by different government departments aiming to modernise the tribals resulted in slow erosion of their traditional systems. Interestingly enough, with all these, they lost their faith in their old system, but are unable to adapt to the new one. The tribal economy in Attappady has been a primitive and subsistence one, with high dependence on agriculture, minimum surplus generation and fair distribution. Production and exchange were carried out for meeting basic needs. Agriculture and sale of minor forest products were the two traditional sources of income to the tribals. With the decline of area under cultivation and high deforestation, the income from these sources has declined significantly in many hamlets, especially those located in the vested forest areas. This has forced many tribals to depend on wage labour for their livelihood.

## **TRIBES IN ATTAPPADY**

### **IRULAR**

IRULARS are inhabitants of the Palghat District. They are seen at Pothupara, Mayamudi, Palakapandy and Kunapalam of the Nelliampathi hills, Chittoor Taluk, Koravan Kandi, Kavundikkal and Mattathukad of Agali Amsom, Attapady Valley, Perinthalmanna Taluk and in the Wayalar forests of the Palghat Taluk. The dialect of those in Kerala include quite a lot of Malayalam Phrases and a visitor with knowledge of Malayalam or Tamil can fare well. Irulars are preserving and clever agriculturists. A few are still Ponam cultivators. What is cultivated depends on the soil and environment. Paddy, raggi, dhal, plantains, chillies and turmeric are grown in large quantities. Both men and women take an active part in agricultural operations, hunting, rearing and vending goats and poultry. A small number of Irulars continue their animistic practices, treat the tiger as their visible god, and worship its footprints. The majority worship Vishnu under the name of Rangaswami and Siva without differentiation. According to the 2011 census, their population can be estimated to be 23,721.

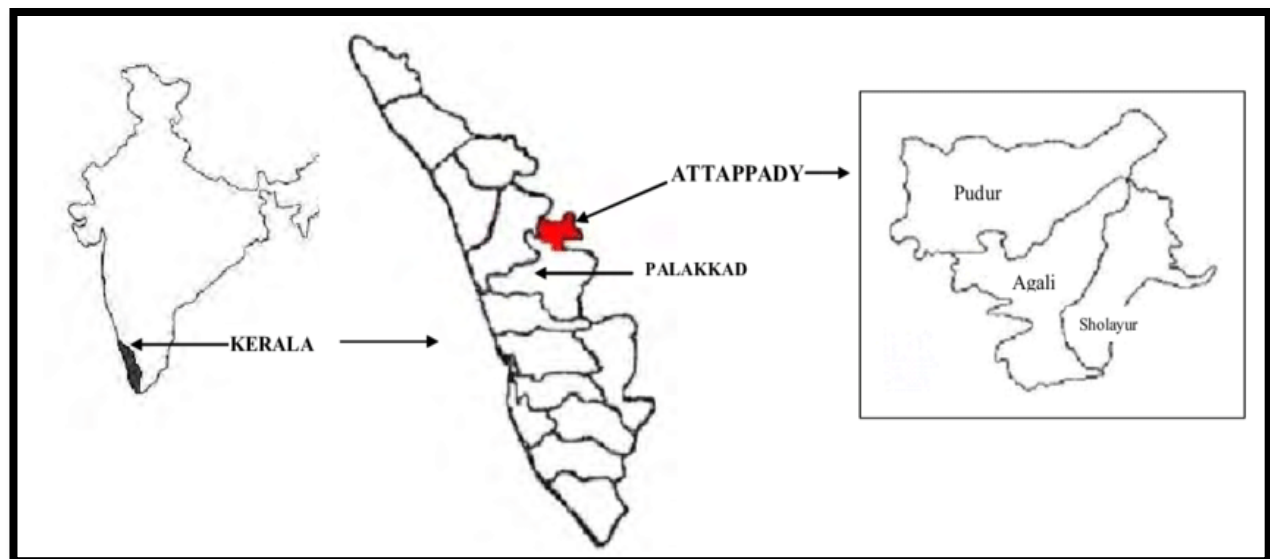
### **MUDUGAR**

MUDUGARS are habitants of the Palghat District. They are seen at Agali and Pudur Amsoms, Attapady Valley, Perinthalmanna Taluk and in the Walayar forests of the Palghat Taluk. According to the 2011 census, their population can be estimated to be 23,746. They speak muduga bhasha which is a dialect of Malayalam and Tamil. The Mudugar have social divisions at kal(clan) level. Cheppila kal, Maniyam kal, Puliyam kal and Dechyam kal are some of these clans. Mudugars have very poor type of huts situated on hills. The floor of the hut is practically

level with the ground, the roof is covered with straw and the hut consists of just one enclosed room which is used for cooking, sitting and sleeping. Mudugars of the Attappady valley are still food gatherers and hunters. Some are seen employed as labourers by the Irulars of the valley. They collect hill produce for sale or barter. The mudugar profess Hinduism. Their god is Siva of the Malleswaram peak and Sivaratri is observed by fast and arduous trek up the 2,000 metre high peak to light lamp, visible throughout Attappady.

## KURUMBAR

KURUMBA live in the dense forests of Attappadi Valley, Palakkad District. They are popularly known as Kurumba Pulayans, Mala Pulayans, Hill Pulayans and Pamba Pulayans. The Kurumba have dialect of their own, locally called Kurumba Basha. The patios seem to be a debased form of Kannada. Except a very few who can converse in Malayalam. The Kurumba are foragers and shifting cultivators. At present also their economy is mainly revolving around their traditional occupation of collecting forest produces like honey, wax, soapnut, turmeric, ginger and wild cardamoms. The Kurumba know the art of body tattooing. Skill in the manufacture of baskets and mats reveals their craftsmanship. Kurumbas are animists and totemists and there has not been much change in their early forms of worship. Their knowledge of Hinduism is disappointing. According to the 2011 census, their population can be estimated to be 2,586.



# SITUATION ANALYSIS

From the details, problems of the Indian tribal community are very clear. They are facing a vast number of problems and struggling to live. Urbanization and modernization affects in their life style. Exploitation by the non – tribal people has also resulted in the destruction of tribal culture in India.

Education is being the one of the major problems of the Tribal community in India. They fall behind the National average literacy rate. Lack of awareness about the importance of education, Lack parental support for the education, difficulty in learning, Understanding the language, Distance from hamlets, Lack of proper transport facility, peer group influence, substance abuse, etc. are the major reasons of low literacy rate among tribal communities in India. There is improvement in scheduled Tribe literacy rate according to the 1961 census the literacy rate of Indian tribes was only 8.53%. 13.83% for male and 3.16% for female.

Health is also a major problem of tribal communities in India. There are many governmental programmes for the improved health status of tribal communities, but the health of tribal community remains unchanged. High Infant Mortality Rate, Maternal Mortality Rate, low life expectancy, Tuberculosis, Malaria, Anaemia, Nutritional deficiency, HIV/AIDS, Cancer etc. are very common among them.

Income and Employment is also a major problem among the tribal communities in India. The majority of the tribal communities or families don't have a proper occupation because of this they don't have proper income. This will affect the proper functioning of their daily life, education of children and also health. The fundamental cause leading to all these problems is the lack of proper education.

Land alienation and the decline in traditional agriculture system, Changed forest policy have affected the tribe lives. In the earlier period tribes were the owners of land but later the non tribal people mortgaged their land due to this the tribes have lost their land and resulted in the decline of traditional agriculture and further it results in their health status.

# PROBLEM IDENTIFICATION

Tribes are the most vulnerable sections of Indian society. They are far away from development. The state and central governments themselves can't solve or address the issues of the Tribal community in India, they need the support of voluntary organizations and people who are committed to involve in social work activities. The below listed are the major problems of Tribes in India, which should addressed and solved.

- Poverty
- Unemployment
- Health problems
- Educational Problems

- Land issues
  - Housing problems
  - Substance abuse
  - Water and Sanitation problem
  - Gender based issues
  - Exploitation by non – tribal people
  - Extinction of race
- Sound sleep is essential for one's physical and psychological development. While living in crowded, unsafe and unhygienic house sound sleep is not at all possible. Sound sleep will bring happiness and reduce tension of a person. The project aims to bring happiness among the tribal families also.
  - Tribes are treated as the lower class people in the society. Because of their poor living conditions, unhygienic dressing and food style and poor economic conditions. While living in a well built house the social status of tribe will definitely improve. The taste of improved living status will compel them to follow a good life style to keep the social status which they occupy.
  - An alternative income generation method will be a solution for all these problems among the tribal people.

## CONCLUSION

Tribal development is a very broad term. We cannot explain it in one sentence or a paragraph. And it takes a long time. A rapid change in the existing system is not at all possible. Especially in the case of tribes which will destroy their whole culture, custom and Tradition. Due to urbanization and changed economy tribes are struggling to live and to find income for their lives. It should note that Tribal development does not mean that changing the culture, custom, language, food pattern, dressing style etc. of the tribal people. It should focus on keeping their tradition and providing them all basic amenities to live or to provide a better safe and hygienic environment. The problems of Tribes have identified a long year back. But the government themselves can't solve the problems. There should be external interventions. In health, education, empowerment, environment, employment generation, housing, infrastructure etc.

**Education:** is a one of the major problems of the tribes while comparing with the non – tribal literacy tribes are backward in literacy rates.

**Health:** while comparing the health status of tribes and non – tribes health status of Tribal peoples are very poor in India. Many diseases are so common among the tribal communities. Infant mortality and maternal mortality rate are very high among tribes. It should be controlled by proper interventions in the health care system.

**Environment:** Tribal people do not destroy forests and environment, but the exploitation of forest by the non – tribes are resulting in an extreme difficult situation for the tribes to live. Global warming can be reduced by forestation and reduce the use of Electronic devices and Motor vehicles only.

**Housing:** housing is the foundation of development. For overall development we need a better shelter to sleep and to take a rest, for students to study, etc. a good shelter can be the foundation of physical, mental and social development.

By “SADHGRHAHA” *TRIBAL HOUSING PROJECT* HRDS INDIA aims at constructing the foundation of Tribal development by proving them a good shelter. Along with Sadhgraha, KARSHAKA project aims at financial secuiry of Tribal People in Attappady.



# **CHAPTER - 4**

## **SIGNIFICANCE OF THE PROJECT**



India has 2.4% of world's area with 8% of global bio-diversity. It is one of the 12 mega-diversity hot-spot regions of the world. Other countries being Brazil, Colombia, China, South Africa, Mexico, Venezuela, Indonesia, Ecuador, Peru, USA and Bolivia. Across the country, the forests of India are estimated to harbour 90% of India's medicinal plants diversity. Only about 10% of the known medicinal plants of India are restricted to non-forest habitats. The estimated numbers of plant species and those used for medicinal purpose vary. According to (Schippmann, 2002), one fifth of all the plants found in India are used for medicinal purpose. The world average stands at 12.5% while India has 20% plant species of medicinal value.

There are 7843 licensed pharmacies of Indian System of Medicine in addition to 857 of Homeopathy and a number of unlicensed small scale processing units engaged in the manufacture of the medicines to meet the requirement of 4.6 lakh 'registered practitioners of ISM & H and other users in the country. These pharmacies range from large Indian drug houses like Baidyanath, Dabur, Zandu, Himalaya Drugs, Patanjali etc., employing modern/sophisticated equipments and methods for production of drugs on mass scale to small ones which manufacture drugs generally following the traditional prescriptions of ancient medical texts in the form of Nighantus (Lexicons) and texts on Bhaisaj Kalpana (Pharmacy) that specifically deal with plants and plant products. Many pharmacies attached to Ayurvedic institutes and hospitals and Vaidyas of villages produce drugs for their own consumption.

The largest numbers of these pharmacies are located in the states of Uttar Pradesh, Kerala, Maharashtra and Gujarat and the lowest numbers in the States of North East (N.E.) region. Apart from pharmacies of Indian System of Medicinal & Homeopathy (ISM&H) there are herbal industries like Alchem International, Delhi; Hitashi Chemicals, Calcutta; Kanga Aromatics, Madurai; Herbochem, Hyderabad; Chemiloids, Vijayawada; Natural Remedies, Bangalore, etc., which specialise in production and marketing of plant extracts for the use in the products of allopathy and Homeopathy. Although about 8000 species of plants are estimated to be used in human and animal health care and over 10,000 herbal drug formulations have been recorded in codified medical texts of ayurveda, the pharmaceutical industries are largely based on about 400 plant species. Though accurate and updated data on the requirement of total quantity and quality of crude drug is not available, conservative estimates put the economic value of medicinal plant related trade in India to the order of Rs.1000 crore/year and the world trade over U.S. \$ 60 billion. Unfortunately, data regarding the participation of both licensed and unlicensed firms in the medicinal plants raw material trade, and the extent of their demand for the raw materials are not readily available. The structural break-up of licensed pharmacies in terms of large and small companies is unknown, making it difficult to assess the level of concentration in the market.



# POTENTIAL FOR MEDICINAL PLANTS

Requirement of individual pharmacies varies depending upon the total number and quantity of high and low value medicinal herbs used by them. For example, Gufic, Mumbai, engaged in production of herbal formulations and extracts requires annually 49.5 tons of raw material derived from 49 species worth Rs.18,70,000/-, while an ayurvedic pharmacy Shree Dhootapapeshwar Ltd., Mumbai, requires 204 tons of raw material of 30 species worth Rs.32,46,960/-. M/s. Sandu Brothers Ltd., need 1760 tons of 156 species worth Rs.1, 26, 0000.

Progressive increase in demand of raw material can be inferred from the fact that Dabur India Ltd., one of the largest ayurvedic companies has recorded annual growth rates of 25% in their sales since 1990 and a doubling of their turnover, every three years. A study of the ayurvedic products in both the organised and unorganized marketing channels from 1987-1990 has revealed an increase of nearly 30% in the trade.

Natural sources of various parts of the country collected by unskilled forest dwelling communities and purchased by the contractors at a nominal price. This supply chain often extends to 3 - 4 tiers without much value addition but with increase in sale price at each level. There is, on an average, 70 to 100% increase in sale price of crude drugs from primary collector's level to pharmacy level.

India, as described earlier is a virtual treasure trove of plant species. Despite substantial pace of growth in the medicinal plant and product market, India's share in world market of medicinal plant and products is a mere 2.5 percent. The export market is growing faster than the domestic market. However, the export is being carried out in form of plants, or their parts and not as value added products. Countries that import plant and plant parts are invariably less biodiversity but are technologically advanced which show a higher capability to develop value added products from the imports.

The Indian exporters face major constraints while exporting medicinal plants. The cyclical nature of medicinal plant market makes it difficult for them to determine supply and demand in the markets. Also, competition from synthetic substitutes, non-compliance with rules and regulation of the importing countries, hoarding and manipulation by large importers, poor quality control, inadequate information on market trends, use of obsolete technology and lack of established methods for cultivation of large number of plants, etc. compound the problem of export of medicinal plants or their products from India.

It is interesting to note that India has negligible patents on plant based formulations, extracts and products. The reason is not far to seek. The existing Patent Act provides only process protection and therefore only the method for preparing a formulation can be protected and not the formulation itself. The process patents are therefore less effective in cases where variations are possible without significantly changing the effectiveness. Traditional knowledge held by communities, in the classical sense, cannot be patented. Much of the traditional knowledge that is not catalogued, is not part of the prior art. Thus knowledge of the tribal and indigenous communities has novelty, non-obviousness and industrial application which are the basic requirements for acquiring protection under Trade Related Intellectual Property Rights agreement of the World Trade Organization.

A major lacuna in Ayurveda is the lack of drug standardisation, information and quality control. Most of the Ayurvedic medicines are in the form of crude extracts which are a mixture of several ingredients and the active principles when isolated individually fail to give desired activity. This implies that the activity of the extract is the synergistic effect of its various components. In the absence of pharmacopoeia data on the various plant extracts, it is not possible to isolate or standardise the active contents having the desired effects. Ayurvedic pharmacopoeia compiled on modern lines and updated periodically is an urgent requirement. A combination therapy integrating Ayurveda and allopathy whereby the side effects and undesirable reactions could be controlled can be thought of. Studies can show that the toxic effects of radiations and chemotherapy in cancer treatment could be reduced by Ayurvedic medications and similarly surgical wound healing could be accelerated by Ayurvedic medicines. Modern science and technology have an essential role to play in the process. An integrated approach for the cultivation, conservation and preservation of important plant species through plant molecular biology, plant tissue culture; research on the rationale and methodology of Ayurvedic medical practice; isolation of active constituents and their development into new therapeutics; standardisation and validation of known herbal medicines and other related aspects need to be focussed upon.

Despite the diverse nature of crops grown in the country and the existence of a fast growing pharmaceutical sector, the share of India in world trade is quite insignificant considering the large geographical area. However, this is bound to rise rapidly with better research inputs and efficient management of the farm sector. So far, India has been involved in the export of only large volume raw material. To achieve competitive advantage we need to resort to low volume high cost (value) trade through value addition to the raw and unfinished products. It is therefore, necessary to develop genetically superior planting material for assured uniformity and desired quality and resort to organised cultivation to ensure the supply of raw material at grower's end. Post harvest storage and process technologies need to be developed to produce the value added finished products that may be directly utilised by the industry. Inventorisation of herbal drugs used in traditional and modern medicines for a country like India, appears to be a stupendous task, where a number of well established indigenous or traditional systems, including Ayurveda, Unani, Siddha, Homoeopathy, Tibetan, Amchi, Yoga and Naturopathy are practised along with modern medicine for the management of total health care system. In all these systems a large number of plant drugs are used, although there may be some common plants. Another problem in correct identification of plants is that the plant drugs in those systems of medicine are known by their classical, *Shastriya* or vernacular names. It is not easy to correlate these names with acceptable scientific names. One plant species can have many vernacular classical names and one name may refer to different plant species.

# MARKET AND MARKET PROMOTION

National Medicinal Plants Board (NMPB) of Ministry of AYUSH has been implementing the Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants under which a grant of Rs.144.28 crores has been released over the last three years to various organizations including State Forest Departments, R&D institutions for taking up activities relating to overall development of medicinal plant sector. An area of about 30929 hectare has been covered for resource augmentation, in-situ conservation and setting up Medicinal Plants Conservation Areas (MPCAs) for these plants, in addition to other related activities. Besides, under the Centrally Sponsored Scheme of “National Mission on Medicinal Plants”, the NMPB has released Rs.140.43crores to different State Governments over the last three years for cultivation of medicinal plants on farmers land, along with backward and forward linkages. In addition to the above, a network of 670 protected areas (102 National Parks, 517 Wild Life Sanctuaries, four Community Reserves and 47 Conservations Reserves) in different bio-geographic regions of the country have been setup under the programmes of Ministry of Environment, Forest and Climate Change, for conservation and management of flora and fauna of the country, including medicinal plants.

## Medicinal Plants Having Consumption of more than 10 Tonnes per Year in India

S. No	Botanical Name	Family	Habit	Part Used
1	Acacia catechu	Mimosaceae	Tree	Stem Extract
2	Achyranthes aspera	Amaranthaceae	Herb	Whole Plant
3	Adhatoda beddomei	Acanthaceae	Herb	Whole Plant
4	Adhatoda zeylanica	Acanthaceae	Shrub	Leaves
5	Aegle marmelos	Rutaceae	Tree	Roots, Fruit Pulp
6	Aerva lanata	Amaranthaceae	Herb	Whole Plant
7	Alpinia galangal	Zingiberaceae	Herb	Rhizomes
8	Alpinia malaccensis	Zingiberaceae	Herb	Rhizomes
9	Andrographis paniculata	Acanthaceae	Herb	Whole Plant
10	Aphanamixis polystachya	Meliaceae	Tree	Bark
11	Aristolochia indica	Aristolochiaceae	Climber(H)	Roots
12	Aristolochia tagala	Aristolochiaceae	Climber(H)	Roots
13	Asparagus racemosus	Liliaceae	Herb	Roots
14	Bacopa monnieri	Scrophularaceae	Herb	Whole plant

15	Boerhaavia diffusa	Nyctaginaceae	Herb	Whole plant
16	Bombax ceiba	Bombacaceae	Tree	Bark, Gum Exudate
17	Borassus flabellifera	Arecaceae	Tree	Fruit
18	Butea monosperma	Fabaceae	Tree	Bark, Fl & Seeds
19	Caesalpinia bonduc	Fabaceae	Shrub	Roots, Seeds
20	Calycopteris gigantean	Asclepiadaceae	Herb	Roots, Lvs, Fl
21	Calycopteris floribunda	Combretaceae	Shrub	Fruits, Lvs
22	Cassia tora	Fabaceae	Herb	Roots Seets
23	Cayratia pedata	Vitaceae	Climber(H)	Whole Plant
24	Celastrus paniculatus	Celastraceae	Liana	Seeds
25	Centella asiatica	Apiaceae	Herb	Whole Plant
26	Citrullus colocynthis	Cucurbitaceae	Herb	Roots, Fruits
27	Costus speciosus	Costaceae	Herb	Roots
28	Cynodon dactylon	Poaceae	Grass	Whole Plant
29	Cyperus esculentus	Cyperaceae	Herb	Roots
30	Cyperus rotundus	Cyperaceae	Herb	Rhizomes
31	Desmodium gangeticum	Fabaceae	Shrub	Roots
32	Dioscorea bulbifera	Dioscoreaceae	Climber(H)	Tubers
33	Dolichos biflorus	Fabaceae	Herb	Seed
34	Eclipta alba	Asteraceae	Herb	Whole Plant
35	Embelia ribes	Myrsinaceae	Liana	Fruits, Seed, Root
36	Fumaria indica	Fumariaceae	Herb	Whole Plant
37	Garcinia gummigutta	Cluciaceae	Tree	Resin
38	Garcinia india	Cluciaceae	Tree	Fruit/Seeds
39	Garcinia morella	Cluciaceae	Tree	Seeds
40	Gardenia gummifera	Rubiaceae	Tree	Resin(Fl)
41	Gmelina arborea	Verbenaceae	Tree	Roots
42	Helicteres isora	Sterculiaceae	Shrub	Fruits
43	Hemidesmus indicus	Asclepiadaceae	Climber(H)	Roots

44	<i>Holarthena antidysentrica</i>	Apocynaceae	Shrub	Bark, Seed
45	<i>Ichnocarpus frutescens</i>	Apocynaceae	Liana	Stems
46	<i>Ipomoea maruritiana</i>	Convolvulaceae	Climber(H)	Whole Plant
47	<i>Ipomoea nil</i>	Convolvulaceae	Herb	Seeds
48	<i>Lepidium sativum</i>	Brassicaceae	Herb	Seeds
49	<i>Laptadenia reticulate</i>	Asclepiadaceae	Shurb	Stems
50	<i>Luffa echinata</i>	Cucurbitaceae	Climber(H)	Seeds
51	<i>Mallotus phillipensis</i>	Euphorbiaceae	Tree	Fruits
52	<i>Mucuna pruriens</i>	Fabaceae	Climber(H)	Seeds, Roots
53	<i>Nigella sativa</i>	Nigellaceae	Herb	Seeds
54	<i>Oroxylum indicum</i>	Bignoniaceae	Tree	Roots
55	<i>Pedaliium murex</i>	Pedaliaceae	Herb	Whole Plant, Fruits
56	<i>Peganum harmala</i>	Zygophyllaceae	Herb	Seeds
57	<i>Phyllanthus amarus</i>	Euphorbiaceae	Herb	Whole Plant
58	<i>Phyllanthus emblica</i>	Euphorbiaceae	Tree	Fruits
59	<i>Piper longum</i>	Piperaceae	Shrub	Fruits, Roots
60	<i>Plumbago indica</i>	Plumbaginaceae	Shrub	Roots
61	<i>Plumbago zeylanica</i>	Plumbaginaceae	Herb	Roots
62	<i>Polygonum glabrum</i>	Polygonaceae	Herb	Roots, Leaves
63	<i>Premna serratifolia</i>	Verbenaceae	Tree	Roots
64	<i>Pseudarthria viscida</i>	Fabaceae	Climber(H)	Roots
65	<i>Psoralea corylifolia</i>	Fabaceae	Herb	Seeds
66	<i>Puereria tuberosa</i>	Fabaceae	Climber(H)	Tubers
67	<i>Punica granatum</i>	Punicaceae	Shrub	Fruit Peels/Rind
68	<i>Ricinus communis</i>	Euphobiaceae	Shrub	Whole Plant
69	<i>Rubia cordifolia</i>	Rubiaceae	Climber(H)	Stems
70	<i>Sida cordifolia</i>	Malvaceae	Herb	Stems, Roots
71	<i>Sida rhombifolia</i>	Malvaceae	Herb	Roots
72	<i>Solanum melongena</i>	Solanaceae	Shrub	Roots, Lvs, Fr
73	<i>Solanum nigrum</i>	Solanaceae	Herb	Whole Plant
74	<i>Solanum torvum</i>	Solanaceae	Herb	Whole Plant
75	<i>Solanum xanthocarpum</i>	Solanaceae	Herb	Whole Plant
76	<i>Stereospermum suaveolens</i>	Bignoniaceae	Tree	Roots

77	Symplocos racemosa	Symplocaceae	Tree	Bark
78	Terminalia arjuna	Combretaceae	Tree	Bark, Lvs
79	Terminalia bellerica	Combretaceae	Tree	Fruits, Rind
80	Terminalia chebula	Combretaceae	Tree	Fruits
81	Thespesia populnea	Malvaceae	Tree	Bark
82	Tinospora cordifolia	Menispermaceae	Climber(H)	Stems, Seeds
83	Tragia involucrate	Euphorbiaceae	Climber(H)	Roots
84	Tribulus terrestris	Ygophyllaceae	Herb	Roots, Fruit
85	Vernonia anthelmintica	Asteraceae	Shrub	Fruits/Seeds
86	Withania somnifera	Solanaceae	Shrub	Roots
87	Woodfordia fruticosa	Lythraceae	Shrub	Flowers

## Number of Plant species used medicinally worldwide.

Country	Plants species	Medicinal plant species	Percentage
China	26,092	4,941	18.9
India	15,000	3,000	20.0
Indonesia	22,500	1000	4.4
Malaysia	15,500	1,200	7.7
Nepal	6,973	700	10.0
Pakistan	4,950	300	6.1
Phillippines	8,931	850	9.5
Sri Lanka	3,314	550	16.6
Thailand	11,625	1,800	15.5
USA	21,641	2,564	11.8
Vietnam	10,500	1,800	17.1
Average	13,366	1,700	12.5
World	422,000	52,885	

# Numbers and percentage of medicinal plant species recorded from different countries and regions

Country or region	Total no. of native species of flora	No. of species of medicinal plants	% of flora which is medicinal
China	27,100	11,146	41
India	17,000	7,555	44
Mexico	30,000	2,237	7
North America	20,000	2,572	13
World	297,000,-510,000	52,896	10-18



# **CHAPTER – 5**

## **PROJECT LOCATION; CLIMATIC & GEOGRAPHICAL CHARACTERISTICS**





The area called Attappady is the east-slopping, deeply dissected valley of the Bhavani River located at an average elevation of 500 m above mean sea level. The Kunda and Kovakunda ranges of the Nilgiris rising up to more than 2000 m form its northern boundary. The Siruvani, Palamala and the Varadimala ridges form its south-western, southern and south-eastern border. Though there are occasionally higher peaks, the ridges are on an average 1500 m high. A low saddle open out on the western part of Attappady and this is the Thenkara - Mukkali access into Attappady from the west. On either side of this saddle, high north-south ridges link the Nilgiris with the Siruvani hills. All along to the west of this ridge is the Palakkad plains. On the eastern side of Attappady, between the Nilgiris and the Varadimala ranges, there are a series of low east-west ridges through which Bhavani river exits from the Attappady plateau. The road-link from Anakkatty in Attappady continues on to Thadakam and further east to the Coimbatore plains. A number of spur hills run down from the high Nilgiris to the valley of Bhavani in the northern half of Attappady plateau. Similarly, a series of ridges run out towards the north-west and north-east from the Siruvani and Varadimala ridges on the southern half of Attappady. Bhavani originating in the Nilgiris and smaller tributaries such as the West and East Varagar draining the southern slopes of the Nilgiris receives the Siruvani River flowing from the south-western part of Attappady. Kodungarapallam draining in Varadimala ridge flows north along the south-eastern edge of Attappady and joins Bhavani at Koodappatty. The Kuntha River flowing south from the Nilgiris forms the north-eastern border of Attappady for a short distance and joins Bhavani further to the east in Tamilnadu. Attappady was a heavily forested humid tropical eastern slope of the Western Ghats with flora and fauna, typical of the heavy rainfall southern part of the Western Ghats in peninsular India.

Sl No.	Slop of Land/ Speciality Area	Hectares	%
1	Plains	432.5	0.5
2	Slop of 5 – 10 degrees	1147.5	1.54
3	Slop of 10 – 15 degrees	3055	4.10
4	Slop of 15 – 35 degrees	26040	34.95
5	Steep Slop	42752	57.39
6	Streams, Rivulets	875	1.17
7	Ponds	197.5	0.27

## Climate, Rainfall and Natural Vegetation

Attappady has essentially a humid tropical climate. The Crestline of the Nilgiris and peaks elsewhere reaching above 1800m have a sub-temperate climate with winter night temperatures going below 1 Z°C. Frost is not uncommon. Topographical heterogeneity, proximity of the high Nilgiris, location close to the Palakkad Gap, its position as an east slopping mid-elevation plateau, all create a wide range of climatic conditions within the compact area that we call Attappady. The western part and the southern part of Attappady get most of its rain from the south-west monsoon. On the other hand, the eastern portion receives most of its rain during the north-east monsoon. The higher Nilgiri ridges and the Siruvani hills get plentiful rainfall from

both the monsoons. Because of the position of high ridges intersecting rain-bearing clouds within Attappady, even nearby locations have very different microclimates. Extensive denudation and the repeated failure of the north-east monsoon have contributed to accelerating desertification of Attappady. The altitudinal, climatic and topographic peculiarities have contributed to a wide range of forest vegetation types occurring in Attappady. Repeated human incursions over many millennia and its impact on the ecology have added a spectrum of degradative or successional phases to the original forest vegetation. The recent extensive and intensive human manipulations have accelerated the degradative change in plant communities. All the higher ridges have sub-temperate montane evergreen forests and wet temperate grasslands above 1600m. Extensive grasslands with small patches of montane evergreen forests is called shola Grassland vegetation. Extensive reaches of the Nilgiris and peaks in Siruvani hills have this forest type. Below 1600m until about 900m above mean sea level and in sheltered valleys receiving more than 1800 mm of rainfall annually, typical evergreen forests, which are also called rainforests, occur. Silent Valley and Attappady reserve forest have extensive areas of this type of forest. Most of the remaining areas of Attappady used to be covered by semi evergreen forests. Areas with less moisture retaining soils and abandoned 'gloom' areas with regenerating vegetation had moist deciduous forests. Excepting in the government Reserved Forests, most of the uncultivated, but previously forested areas of Attappady retain only scrub vegetation at present. Some ridge tops subjected to regular annual fires have savanna vegetation.

## **Ecology**

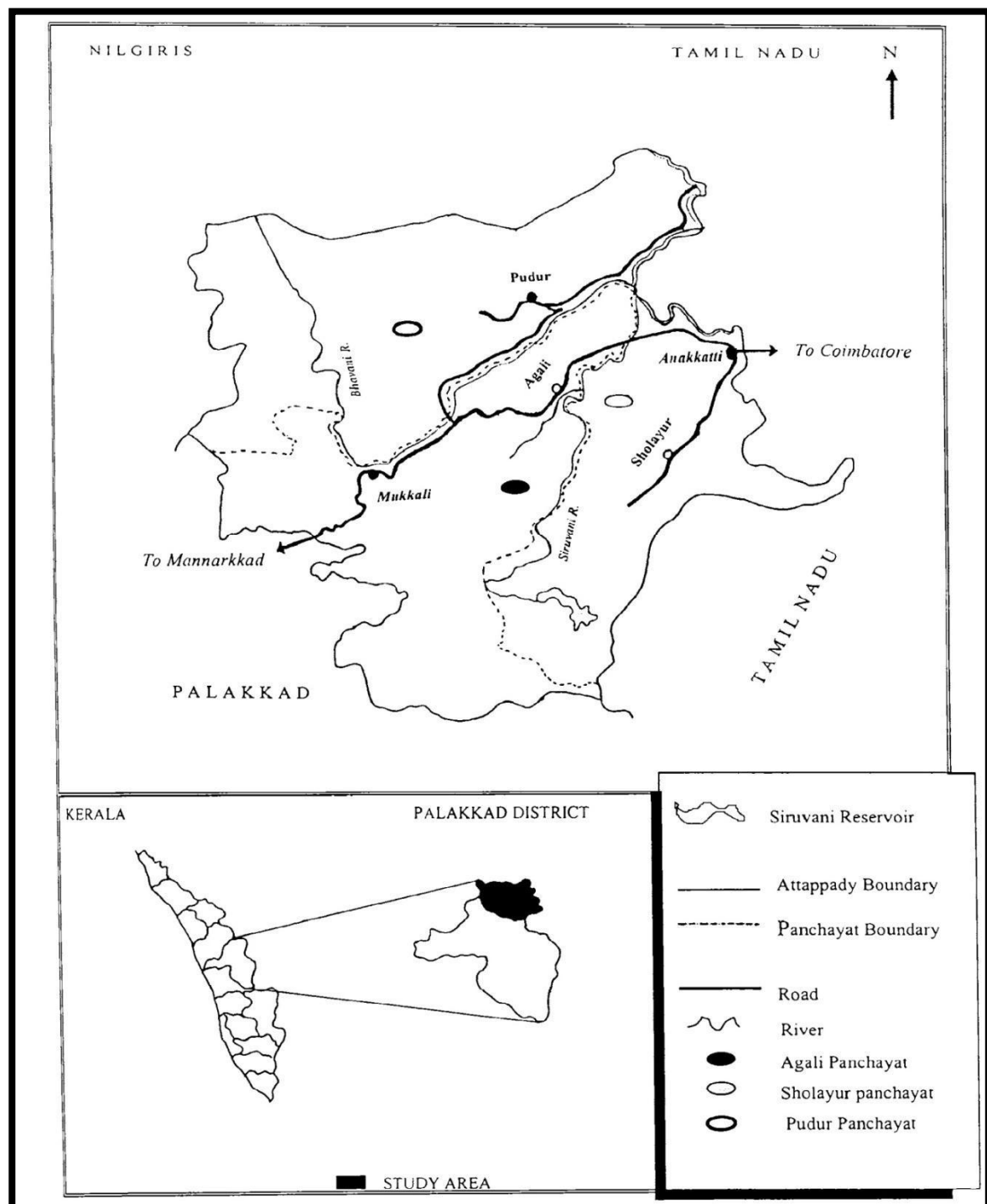
Attappady is a continuing hot spot of ecological destruction. Despite it had been blessed with fertile soil, three perennial rivers, well spread adequate rainfall, equitable climate, a forest cover ranging from sub-temperate montane shola-grasslands to evergreen forests and semi-deciduous vegetation and also with people capable of maintaining the ecological balance its degradation is dramatic within the past few decades. The ecological degradation of the area had begun since the colonial government's intervention through its forest policies and it became acute since it had been integrated with the Kerala state in 1957 [Nair 1988]. The major activity that destroyed the eco-system of a deep forest into a desert like landscape is the conversion of forest into arable land by settlers. Deforestation and the introduction of non-eco friendly agriculture practices have degraded the vegetation cover almost beyond regeneration. With the loss of vegetation, subsequent massive soil erosion changed the local climate and made rainfall erratic. This has resulted in the loss of perennial nature of the rivers of Attappady as their catchments area has become relatively drier due to ecodestructive human involvement.

## **RIVERS**

Two major rivers Bhavani, in the northern half, and Siruvani, in the southern half, originate in this area and flow towards east into Tamil Nadu and join to form a tributary of Caveri. The Bhavani river springs from the Kundha mountains near Kudikadubeta in the Nilgiris. Before it enters into Kerala, Bhavani is fed by two streamlets just 9.66 km away from its starting point. These are in Tamil Nadu. About 18.5 km from its entry into Kerala, it takes a right angled turn and flow there after more or less in a north easterly direction draining along its course a few more tributaries until it passes beyond Kerala borders. It takes a circuitous course through the

Attappady valley. The numerous streamlets winding in and out of the many hills of Bhavani river drain the whole valley . Bhavani river, though a blessing to the southern half of Attappady valley, remains dry during summer seasons making the land and people waiting for another rainy season. The catchment area of the Bhavani river in Kerala comes to 569.8 square kilometre.

The Siruvani River takes its origin from Muthikulam Reserve Forest, then it flows into a deep and legendary lake called Muthikulam, which lies at an elevation of about 1219 metres above seal level. At Muthikulam a diversion work takes off water for the drinking purposes of Coimbatore Municipality about 45.1 km. From Muthikulam the river takes its direction towards north east and join Bhavani river at Koodappatty at the boundary of Coimbatore district in Tamil Nadu . Like Bhavani, Siruvani also remains dry-up during early summer onwards mainly due to diversion of water to Coimbatore town.



Being located in the rain shadow Attappady receives much lower monsoon rainfall. The mountain ranges separating the valley from Mannarkad obstruct much of the rain-bearing clouds. Consequently, a rain-shadow area is formed beyond and east of the mountain ranges. The slopes facing the west and the areas immediately lying to the east receive high rainfall. As one moves to the east towards the border of Tamil Nadu, the rainfall declines sharply. The average rainfall varies 794.87 mm at Agali to 794.98 mm at Pudur. Much higher rainfall, varying from 1574 mm at Sholayur to 2289.6 mm at Mukkali, is received in the highly elevated region in the western parts near the origin of Siruvani and Bhavani rivers respectively. The spatial variation in rainfall is very high in Attappady region. The monsoon starts during the month of May and continues up to November with a high rainfall period during July and low rainfall period during the month of August.



# **CHAPTER - 6**

## **PROPOSED PLAN OF ACTION**



## 6.1 INTRODUCTION

The outcome of the project is to provide financial security to the tribal families by promoting the cultivation of medicinal plants in their own land. The action plan prepared for this purpose to implement the proposed project with outstanding result. During field visits and community meetings, it is understood that the tribes in project location are in a very poor living conditions. Most of them are living in unhygienic situations in mud shelters sealed with plastic sheet as roof. Preliminary discussions with the concerned people and the community surveys strongly recommending that income generation methods essential for the tribal people. Hence HRDS INDIA has taken this initiative to promote the cultivation medicinal plants in our KARSHAKA PROJECT along with our Tribal Housing Project Sadhgraha. The project mainly focuses to uplift the living conditions of tribes through various activities to empower the living status of the tribal people.

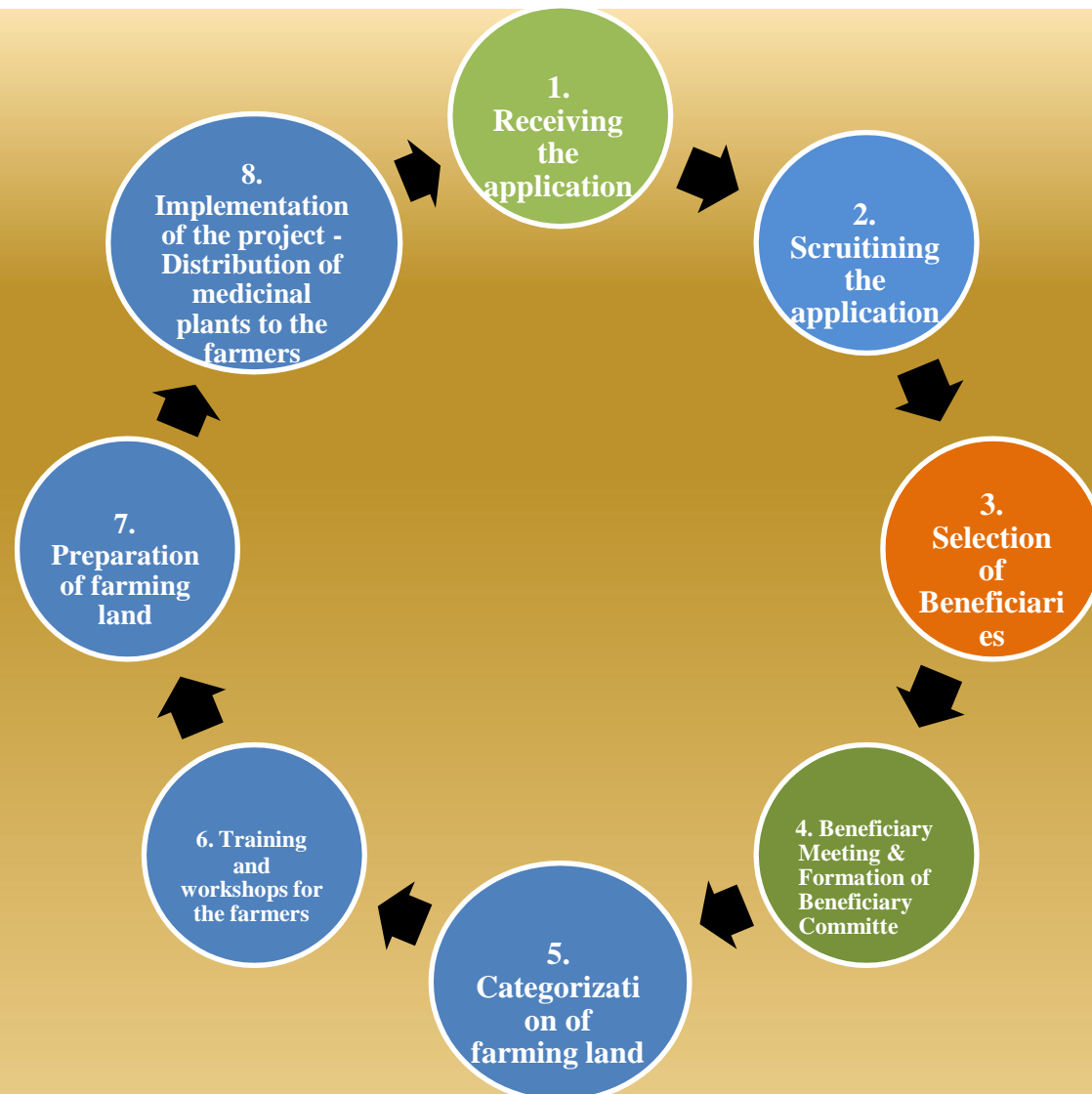
# PROPOSED PROJECT AND ACTION PLAN

Project Location	Attappady
Project Area	5000 Acre
Duration of the Project	5 Year
Nature of the project	Cultivation
Core product	Medicinal Plant & Products
Community	Tribal Community
Expected Market	India & Abroad





# IMPLEMENTATION STRATEGY OF THE PROJECT







## **OBJECTIVES OF BENEFICIARY COMMITTEE**

- To improve community harmony
- To promote cultivation of medicinal plants among the other community people
- To create awareness among community people on various social issues
- To find out school dropout children and support him/her for education
- To prevent substance abuse in the community
- To protect children from child labour, child abuse and child marriage

## **MONITORING OF THE PROJECT**

Monitoring is the routine collection and analysis of information to track progress against set plans and check compliance to established standards. It helps identify trends and patterns, adapt strategies and inform decisions for project management. It is essential for smooth functioning of the project to detect challenges and changes in the community as early as possible and to tackle it with proper planning.

- Monitoring of Karshaka Project will be done by various committees formed under the supervision of HRDS INDIA.
- A General Committee (beneficiary committee) will be formed by including all the beneficiaries of the project.
- There will be an Agricultural Development Committee for the overall management and functioning of the Project under HRDS INDIA. This committee will take key role in the Management and Monitoring of the Project
- The Agricultural Development Committee will consists of One Convener and Eight Members.
- The committee will be in charge of preparation and signing of whole documents regarding Karshaka Project.
- An Agricultural Advisory Committee will be formed
- The sitting MP, MLA, Panchayat Presidents and the District Panchayat Member will be the Patrons of the Committee, District Collector, Sub Collector, BDO, Principal Agricultural Officer, ITDP Officer, etc. will be the ex – officio members of the committee, Agriculture Scientists, Elected Representatives from beneficiaries will be the members of the committee.
- Dr. S. Krishnakumar IAS (Retd), Aji Krishnan will be the Chairman and Vice Chairman of the committee respectively.
- D. Narayanan will be the General Convener, Joy Mathew, P. Sudevan and M.K Sudhir will be the Conveners, Rejula Bhai and Nisha.N will be the Joint Conveners of the Committee.
- In the Panchayath level, there will be working groups headed by separate Conveners for the Karshaka Project.

**Proposal management:** The preparation of the project proposal started only after analyzing the baseline socio – economic survey details. Monitoring process started with the proposal of project and it ends only after the evaluation of the project. The formed committees of the project will monitor the progress and gave guidelines for the improvement.

**Community Management:** In the community management, the formed Agricultural Development Committee will play the key role. The officials of the committee maintains a good relationship with the community. They visited the tribal hamlets and interacted with tribal and explained about the benefit of the project to the tribal people during the pre – study phase of the project. It will continue till the end of the project.

**Cost management:** - The chief financial officer of HRDS INDIA will monitor the cost of the Project, will assess whether the project is going on the same cost or less or more cost than pre- planned. It will avoid unexpected expenses and variation in project cost.

**Staff Management:** - High amount of manual labour is required for the project. The labourers will be from the tribal community. Trainings and workshops for the staffs will be provided on particular time gap. The formed committee will Manage and Coordinate the staffs in the project.

**Communication management:** Communication between the regional project office and Project office is essential for the smooth functioning of the project. The Project Director will communicate and update the details of the project to the Main Project office.

**Quality Management:** The Agricultural Scientists of the project will Manage and Monitor the process of cultivation of medicinal plants. It is essential to maintain the quality of the raw materials.

b. Quality test of raw materials: The quality of medicinal plants/ Raw materials will be tested in the laboratory by the experts before marketing the products.

# EVALUATION

Project evaluation is a systematic or objective assessment of a completed project.

There will be evaluation after completion of every fixed target. The project team will evaluate the project.

The following components will be assessed in project evaluation

- Expected result
- Improvement in economic status of Tribal people
- Improvement in health status of Tribal people
- Environmental sustainability in the area
- Improvement in Education of Tribal people.

# PROJECT SUSTAINABILITY AND FOLLOW UP

Karshaka is a long term project. Each year there will be new beneficiaries in the project. The project team will provide training and work shops for the new and needy beneficiaries in every year. There will be the assistance of project staffs in all time. The sustainability of the project is based on the marketing of the medicinal plants. Within half of the expected project duration the beneficiaries will be experts in cultivation. After that period HRDS INDIA will be the main bridge between the beneficiaries and traders. The demand for medicinal plants are increasing day by day, the next generation will be completely depending on Ayurvedic products so that the marketing of the medicinal plants / raw materials will not be a complicated phase. Moreover there will be efforts to produce medicinal products by using the locally produced medicinal plants.



# **CHAPTER - 7**

## **Proposed Research Centre**



# **PROPOSED RESEARCH CENTRE**

## **“NATIONAL RESEACH CENTRE FOR MEDICINAL PLANTS AND ENVIRONMENT (NRCME)”**



HRDS INDIA

**HRDS INDIA**

(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY) DOOR  
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## **Aim of the Proposed Research Institute: Development of Green Industries, Human Resources and Biodiversity activities through Research and Development.**

### **Introduction**

Nowadays consumers demand more safe and eco-friendly products due to serious concern on health issues. Eco friendly products are nothing but products that are being manufactured with the thought that the procedure of producing as well as distributing those products are not having any kind of negative impacts or harm to the environment or ecology. Many of the leading manufactures in developed countries have understood the market potential and have initiated extensive research in developing healthy products. On the other hand the increasing demand for such eco-friendly products including have resulted injudicious exploitation of natural resources and that led to pushing several plant species into the verge of rarity. Considering the significance of maintaining our environment clean and pollution free, several efforts are being made from various quarters including public and private sectors to boost up environment friendly industries/green industries for the sustainable development of our society.

The state of Kerala has been identified as the Centre of Origin of many economically important agri crops and also renowned with many ayurvedic products for a variety of uses. Current reports reveal the great demand for natural products/eco-friendly products in the state as well as all over the world. As against this, the major problem identified is the availability of quality seedlings in the case of agri crops and apart from that lack of suitable technologies for the development of value-added products using our own natural resources. Considering the huge demand for quality seedlings of agri- crops and medicinal plants together with the current trend towards cultivation/rearing of our native species and breeds, establishment of proper centers is imperative.

### **Why we need a new Research Centre?**

Demand for quality seedlings and value added products including natural food colours, natural fabric dyes and many other products using our natural resources is reported to be increasing every year at a pace of not less than 10-20%. Though many research Institutes with scientific research are undergoing in our state as well as the country as a whole, availability of suitable technology from such institutions is still hard due to many reasons. Therefore, establishment of a research laboratory is important to address the issues related with the development of quality seedlings/native breeds and value-added natural products.

## **Role of the Centre**

The centre would be focused on research activities leading to the development of technology/products suitable to the overall growth of green industries including ayurvedic industry and agri-horti sector. Apart from that, the centre would also be involved in genetic improvement programmes and development of important products using our natural resources appropriate to the national and international markets and also for the promotion of biodiversity services.

### **(a) Enriching Biodiversity**

Apart from the rich commercial potential of screw pine plants, the most important impact of the plants is its profuse slit roots and their eminent capacity to protect soil erosion and landslide. Previous studies also revealed that coastal vegetation of Pandanus can play a significant role in reducing tsunami energy (Mascarenhas and Jayakumar 2008; Thuy et al. 2012). Pandanus is now widely used for planting in sea shores for tsunami force mitigation. In addition to re-establishing nature's protective defenses and acting as a natural barrier against possible future natural hazards, efforts are being made to realign the balance of damaged ecosystems by planting screw pine plants, which if utilized and managed sustainably, can provide a wealth of socio- economic opportunities to coastal communities (Paterson 2008) and also for biodiversity and water conservation.

### **Plant Tissue Culture and social responsibility**

At present, hazards such as, habitat degradation, over exploitation and anthropogenic destruction of ecosystems, etc., have threatened many of the world's plant and animal population, shrinking their gene pool and thereby taking them to the verge of extinction.

The successful development of tissue culture protocol for mass multiplication of selected crops has immense scope in agriculture sector as well as biodiversity services. The research centre would also involve in the development of value-added products from the natural resources for the development of green industry thereby people belong to dejected category (scheduled caste/scheduled tribes) can be brought to the mainstream to enter into cultivation/rearing of suitable plant species for their livelihood.

### **Following are the major research activities**

#### **Activity No. 1**

Establishment of Plant Tissue Culture laboratory for large scale multiplication of banana, medicinal plants, horticultural plants etc.

#### **Activity No.2**

Development of value-added products (natural food colors, natural fabric dyes) using natural resources.

### Activity No.3

#### Biodiversity/Environmental services

The centre would also involve in providing biodiversity services through intense investigation for elucidating the efficacy of selected plant species for protecting river banks, sides of small streams, rivulets etc from massive soil erosion and landslides. Such biodiversity service activity would certainly help enrichment of aquatic fauna and water conservation. The activity would also help to save revenue expenditure in constructing granite based wall. Apart from this activities the centre would also involve in solid waste management.

### Activity No.4

#### Development of therapeutically important nutritional products using natural resources

### Activity No.5

#### Development of effective organic pest/insect repellents and package of practices for pesticide-free

In addition to the cited major research activities, scientific efforts will also be given towards achieving the following

- **Development of Human resources:** The centre would also focus on developing rich human resources through serious research in the selected areas corroborated with the mandate of the Institute for which the centre would be affiliated to Universities in future.
- **Incubation Centre:** The technology/products developed using our natural resources through scientific research will be incubated in the centre to attract entrepreneurs leading to commercial activities.
- **Common Facility Centre:** Besides, the centre also plans to establish a “**Common Facility Centre**” to impart training to women workers who are involved in varied traditional industry.

#### A centre has to address two basic components

1. **Generation of Knowledge**-through which rich human resource development is possible
2. **Development of Technology/product for commercial application leading to the betterment of society**- facilitates income generation



### Mandate of the centre

- Sustainable use of natural resources for the development of technology/process and useful products leading to environmental protection and commercial utilization.
- Revival of dejected people through the intervention of scientific research and women empowerment
- Development of rich human resources through scientific training and research programmes.
- Genetic improvement of selected crops and release of improved varieties

### Income generation

Income generation through sale of plants/products/technologies/process is anticipated for the self-sustainable existence of the Institute.

In Kerala, it has been estimated that an approximate of 20 crores banana saplings are required. In addition, 0.5 million cardamom and nutmeg saplings are also reported to be needed. The centre aims to produce 5 lakhs plants in the first year and 10 lakhs in the forthcoming years through tissue culture. Income will be generated through the sale of tissue culture derived plants after one year and the growth is expected to be at a pace of 20-30% every year. In addition, the technologies/products developed will also be incubated and transferred for generating income. The centre will be a good addition to **HRDS INDIA** for fostering agriculture productivity, reviving cottage industries and also for rich human resource development.

In order to realize the activities, the centre requires qualified scientists and other supporting technical staff. According to the requirement, the staff pattern is categorized as following.

Category	No. of Posts	Status
<b>Scientific position</b>		
<b>Director (Chief Scientist)- Equal to CSIR, Govt of India</b>	1	Permanent
<b>Senior Scientist</b> (Qualifications will be according to the activities) <b>Equal to CSIR, Govt of India</b>	5	Permanent
<b>Scientist (Equal to CSIR, Govt of India)</b>	5	Permanent
<b>Non-Scientific</b>		
Technical Officer	5	Permanent
Laboratory Assistant-	5	Permanent
Laboratory Attendant	5	Permanent
<b>Administration</b>		
Registrar/Controller of Administration cum PRO	1	Permanent
Section Officer	1	Permanent
Adm. Asst.	2	Permanent
Driver cum Attender	1	Permanent
Multi tasking Staff	1	Permanent
Office Assistant/Helper/Peon	1	Permanent
Part time/ Contingent staff	2	Permanent
<b>Finance Section</b>		
Finance Officer/Finance Controller	1	Permanent

Accountant	1	Permanent
Account Asst.	1	Permanent
<b>Purchase Section</b>		
Purchase Officer	1	Permanent
Office Assistant	1	Permanent
<b>Engineering Section</b>		
Electrical Supervisor	1	Permanent
Plumber	1	Permanent
Engineering Assistant	1	Permanent
<b>System Administration</b>		
System Administrator	1	Permanent
<b>Security Section</b>		
Security Officer	1	Permanent
Security guards	10	Permanent
<b>Garden Section</b>		
Garden Supervisor	2	Permanent
Gardeners	5	Permanent
<b>Total</b>	<b>61</b>	

Fifty percent of the salaries and other benefits to the staff after two years can be met from the income generated through sale of products developed at the centre. Therefore full financial assistance required to run the Institute can be limited for the first two years.

**N:B In addition to direct employment for 61 staff at present, indirect job opportunities for at least 200 people are also ensured.**

## Budget Outlay

Sl No	Item	Budget Year-wise –Rs in crores	
	<b>Plan</b>	2019-20 ,2020-21	Total
1	Construction of Laboratory ( 5000 sqft)	1.50 (Rs 3000/ sqft)	1.50
2	Construction of Poly house and development of farms	0.50	0.50
3	Purchase of Furniture, Equipments, Instruments etc.	1.00	1.0
4	Construction of Hostel, Seminar hall, Guest house etc.	2.00	2.00
5	Overhead charges	0.50	0.50
6	Infrastructure	0.60	0.60
	<b>Salaries &amp; wages</b>		
1	Salary/wages	2.50	2.50
<b>Grand Total</b>			<b>8.60</b>

## Rupees Eight crores and twenty lakhs only

An approximate amount of Rs. 2.50crs. per annum will be required for Salary/wages. The salaries of the staff will be at par with the scale of pay equal to the staff of CSIR (Govt. of India). Whereas wages of Casual laborers will be similar to the state parity. An average hike of 10% p.a. is envisaged in the rates of salaries/wages and overhead charges.

NB: In order to meet the salaries, wages of staff and overhead charges of the research center, at least an amount of Rs 10 crores may be deposited in a separate head so that the interest accrued from the fixed deposit can be used for meeting the expense. Similarly, the amount collected through sale of products/ processes can be used for meeting the laboratory expenses. If the centre can contribute remarkable to the society, it would certainly help hand over the center to Govt. of India in future.

**Location of the Centre:**The main center would be located in Palakkad district and a sub center would be established at Thiruvananthapuram.

# PROPOSED SPICES AND RAW MEDICINE EXTRACTION UNIT



HRDS INDIA

**HRDS INDIA**

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# **CHAPTER - 8**

## **Proposed Spices and Raw Medicine Extraction Unit**



# PROPOSED PROJECT AND ACTION PLAN

## 6.1 INTRODUCTION

Attappady is a geographical area located on the Western Ghats, in Palakkad District of Kerala, where there is a high population of tribal people living. For decades Attappady comes to the news papers and other medias with issues of tribal people. The Tribal people in Attappady are facing a lot of issues. The government is spending a lot of money for the welfare of tribal people even though the situation of Tribal people remains unchanged due to the corruption in administrative level. While comparing with the state average in education the students belonging to Tribal community are far behind, only a few number of students from Tribal community are going for higher studies. Health status of the Tribal people are also same, with comparing to the health status of other general population of Kerala, Tribal population is far behind. Malnutrition, Infant Mortality, Maternal Mortality, Sickle cell Anemia, Tuberculosis and other chronic illness very common among Tribal people. Unemployment rate is also very high among them and which leads to poverty. By this subsidiary project of Karshaka, HRDS INDIA aims for a holistic development of Tribal community.

The outcome of the project is to provide financial security to the tribal families by promoting the cultivation of medicinal plants through HRDS INDIA Karshaka Project and to extract the raw medicine. The action plan prepared for this purpose to implement the proposed project with outstanding result. During field visits and community meetings, it is understood that the tribes in the project location are in a very poor living conditions. Most of them are living in unhygienic situations in mud shelters sealed with plastic sheet as roof. Preliminary discussions with the concerned people and the community surveys strongly recommending that income generation methods essential for the tribal people. Hence HRDS INDIA has taken this initiative to promote the cultivation medicinal plants in our KARSHAKA PROJECT and through this project HRDS INDIA is extracting cultivated raw medicinal plants to various value added products. So that HRDS INDIA can market the commodity directly to the market especially to the major Ayurvedic and Pharmaceutical industries in India. The project mainly focuses to uplift the living conditions of tribes through various income generation activities.

Project Location	<b>Attappady</b>
Nature of the project	<b>Spices &amp; Raw Medicines Extraction</b>
Community	<b>Tribal and other Backward Communities</b>
Expected Market	<b>India &amp; Abroad</b>

# **SPICES & RAW MEDICINE EXTRACTION**

Essential oils are used in a wide variety of consumer goods such as detergents, soaps, toilet products, cosmetics, pharmaceuticals, perfumes, confectionery food products, soft drinks, distilled alcoholic beverages (hard drinks) and insecticides. The world production and consumption of essential oils and perfumes are increasing very fast. Production technology is an essential element to improve the overall yield and quality of essential oil. The traditional technologies pertaining to essential oil processing are of great significance and are still being used in many parts of the globe. Water distillation, water and steam distillation, steam distillation, cohobation, maceration and enfleurage are the most traditional and commonly used methods. Maceration is adaptable when oil yield from distillation is poor. Distillation methods are good for powdered almonds, rose petals and rose blossoms, whereas solvent extraction is suitable for expensive, delicate and thermally unstable materials like jasmine, tuberose, and hyacinth. Water distillation is the most favored method of production of citronella oil from plant material.

## **Sources of natural essential oil**

Essential oils are generally derived from one or more plant parts, such as flowers (e.g. rose, jasmine, carnation, clove, mimosa, rosemary, lavender), leaves (e.g. mint, *Ocimum* spp., lemongrass, jamrosa), leaves and stems (e.g. geranium, patchouli, petitgrain, verbena, cinnamon), bark (e.g. cinnamon, cassia, canella), wood (e.g. cedar, sandal, pine), roots (e.g. angelica, sassafras, vetiver, saussurea, valerian), seeds (e.g. fennel, coriander, caraway, dill, nutmeg), fruits (bergamot, orange, lemon, juniper), rhizomes (e.g. ginger, calamus, curcuma, orris) and gums or oleoresin exudations (e.g. balsam of Peru, *Myroxylon balsamum*, storax, myrrh, benzoin).

## **Methods of Producing Essential Oils**

Regarding hydrodistillation, the essential oils industry has developed terminology to distinguish three types: water distillation; water and steam distillation; and direct steam distillation. Originally introduced by Von Rechenberg, these terms have become established in the essential oil industry. All three methods are subject to the same theoretical considerations which deal with distillation of two-phase systems. The differences lie mainly in the methods of handling the material. Some volatile oils cannot be distilled without decomposition and thus are usually obtained by expression (lemon oil, orange oil) or by other mechanical means. In certain countries, the general method for obtaining citrus oil involves puncturing the oil glands by rolling the fruit over a trough lined with sharp projections that are long enough to penetrate the epidermis and pierce the oil glands located within outer portion of the peel (ecuelle method). A pressing action on the fruit removes the oil from the glands, and a fine spray of water washes the oil from the mashed peel while the juice is extracted through a central tube that cores the fruit. The resulting oil-water emulsion is separated by

centrifugation. A variation of this process is to remove the peel from the fruit before the oil is extracted. Often, the volatile oil content of fresh plant parts (flower petals) is so small that oil removal is not commercially feasible by the aforementioned methods. In such instances, an odorless, bland, fixed oil or fat is spread in a thin layer on glass plates. The flower petals are placed on the fat for a few hours; then repeatedly, the oil petals are removed, and a new layer of petals is introduced. After the fat has absorbed as much fragrance as possible, the oil may be removed by extraction with alcohol. This process, known as enfleurage, was formerly used extensively in the production of perfumes and pomades. In the perfume industry, most modern essential oil production is accomplished by extraction, using volatile solvents such as petroleum ether and hexane. The chief advantages of extraction over distillation is that uniform temperature (usually 50° C) can be maintained during the process. As a result, extracted oils have a more natural odor that is unmatched by distilled oils, which may have undergone chemical alteration by the high temperature. This feature is of considerable importance to the perfume industry; however, the established distillation method is of lower cost than the extraction process. Destructive distillation means distilling volatile oil in the absence of air. When wood or resin of members of the Pinaceae or Cupressaceae is heated without air, decomposition takes place and a number of volatile compounds are driven off. The residual mass is charcoal. The condensed volatile matter usually separates into 2 layers: an aqueous layer containing wood naphtha (methyl alcohol) and pyroligneous acid (crude acetic), and a tarry liquid in the form of pine tar, juniper tar, or other tars, depending on the wood used. This dry distillation is usually conducted in retorts and, if the wood is chipped or coarsely ground and the heat is applied rapidly, the yield often represents about 10% of the wood weight used.

## **Hydrodistillation**

In order to isolate essential oils by hydrodistillation, the aromatic plant material is packed in a still and a sufficient quantity of water is added and brought to a boil; alternatively, live steam is injected into the plant charge. Due to the influence of hot water and steam, the essential oil is freed from the oil glands in the plant tissue. The vapor mixture of water and oil is condensed by indirect cooling with water. From the condenser, distillate flows into a separator, where oil separates automatically from the distillate water.

## **Mechanism of Distillation**

Hydrodistillation of plant material involves the following main physicochemical processes:

- i) Hydrodiffusion
- ii) Hydrolysis
- iii) Decomposition by heat

## **Hydrodiffusion**

Diffusion of essential oils and hot water through plant membranes is known as hydrodiffusion. In steam distillation, the steam does not actually penetrate the dry cell membranes. Therefore, dry plant material can be exhausted with dry steam only when all the volatile oil has been freed from the oil-bearing cells by first thorough comminution of the plant material. But, when the plant material is soaked with water, exchange of vapors within the tissue is based on their permeability



while in swollen condition. Membranes of plant cells are almost impermeable to volatile oils. Therefore, in the actual process, at the temperature of boiling water, a part of volatile oil dissolves in the water present within the glands, and this oil-water solution permeates, by osmosis, the swollen membranes and finally reaches the outer surface, where the oil is vaporized by passing steam. Another aspect of hydrodiffusion is that the speed of oil vaporization is not influenced by the volatility of the oil components, but by their degree of solubility in water. Therefore, the high-boiling but more water-soluble constituents of oil in plant tissue distill before the lowboiling but less water-soluble constituents. Since hydrodiffusion rates are slow, distillation of uncomminuted material takes longer time than comminuted material.

## Hydrolysis

Hydrolysis in the present context is defined as a chemical reaction between water and certain constituents of essential oils. Esters are constituents of essential oils and, in the presence of water, especially at high temperatures, they tend to react with water to form acids and alcohols. However, the reactions are not complete in either direction and the relationship between the molal concentrations of various constituents at equilibrium is written as:

$$K = \frac{(\text{alcohol}) \times (\text{acid})}{(\text{ester}) \times (\text{water})}$$

where K is the equilibrium constant. Therefore, if the amount of water is large, the amounts of alcohol and acid will also be large, resulting in a decreased yield of essential oil. Furthermore, since this is a time-dependent reaction, the extent to which hydrolysis proceeds depends on the time of contact between oil and water. This is one of the disadvantages of water distillation.

## Effect of Heat

Almost all constituents of essential oils are unstable at high temperature. To obtain the best quality oil, distillation must be done at low temperatures. The temperature in steam distillation is determined entirely by the operating pressure, whereas in water distillation and in water and steam distillation the operating pressure is usually atmospheric. All the previously described three effects, i.e. hydrodiffusion, hydrolysis and thermal decomposition, occur simultaneously and affect one another. The rate of diffusion usually increases with temperatures as does the solubility of essential oils in water. The same is true for the rate and extent of hydrolysis. However, it is possible to obtain better yield and quality of oils by: (1) maintaining the temperature as low as possible, (2) using as little water as possible, in the case of steam distillation, and (3) thoroughly comminuting the plant material and packing it uniformly before distillation.

## Three Types of Hydrodistillation

There are three types of hydrodistillation for isolating essential oils from plant materials:

1. Water distillation
2. Water and steam distillation
3. Direct steam distillation

## **Water Distillation**

In this method, the material is completely immersed in water, which is boiled by applying heat by direct fire, steam jacket, closed steam jacket, closed steam coil or open steam coil. The main characteristic of this process is that there is direct contact between boiling water and plant material. When the still is heated by direct fire, adequate precautions are necessary to prevent the charge from overheating. When a steam jacket or closed steam coil is used, there is less danger of overheating; with open steam coils this danger is avoided. But with open steam, care must be taken to prevent accumulation of condensed water within the still. Therefore, the still should be well insulated. The plant material in the still must be agitated as the water boils, otherwise agglomerations of dense material will settle on the bottom and become thermally degraded. Certain plant materials like cinnamon bark, which are rich in mucilage, must be powdered so that the charge can readily disperse in the water; as the temperature of the water increases, the mucilage will be leached from the ground cinnamon. This greatly increases the viscosity of the water-charge mixture, thereby allowing it to char. Consequently, before any field distillation is done, a small-scale water distillation in glassware should be performed to observe whether any changes take place during the distillation process. From this laboratory trial, the yield of oil from a known weight of the plant material can be determined. The laboratory apparatus recommended for trial distillations is the Clevenger system. During water distillation, all parts of the plant charge must be kept in motion by boiling water; this is possible when the distillation material is charged loosely and remains loose in the boiling water. For this reason only, water distillation possesses one distinct advantage, i.e. that it permits processing of finely powdered material or plant parts that, by contact with live steam, would otherwise form lumps through which the steam cannot penetrate. Other practical advantages of water distillation are that the stills are inexpensive, easy to construct and suitable for field operation. These are still widely used with portable equipment in many countries. The main disadvantage of water distillation is that complete extraction is not possible. Besides, certain esters are partly hydrolyzed and sensitive substances like aldehydes tend to polymerize. Water distillation requires a greater number of stills, more space and more fuel. It demands considerable experience and familiarity with the method. The high-boiling and somewhat water-soluble oil constituents cannot be completely vaporized or they require large quantities of steam. Thus, the process becomes uneconomical. For these reasons, water distillation is used only in cases in which the plant material by its very nature cannot be processed by water and steam distillation or by direct steam distillation.

# KARSHAKA PROJECT

“Project Proposal On Cultivation Of Medicinal Plants  
In Attappady For The Sustainable Livelihood  
Of Tribal People”



## **BUDGET** **OF THE PROPOSED PROJECT**



HRDS INDIA

**HRDS INDIA**

(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)

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# CHAPTER - 8

# BUDGET



## **BUDGET IN COMPONENT WISE**

<b>SLNO.</b>	<b>PROJECT</b>	<b>AMOUNT</b>
<b>1</b>	<b>Cultivation of Medicinal Plants</b>	<b>195,80,00,000.00</b>
<b>2</b>	<b>Establishment of National Research Centre for Medicinal Plants and Environment (NRCME)</b>	<b>8,60,00,000.00</b>
<b>3</b>	<b>Establishment of Spices and Raw Medicine Extraction Unit</b>	<b>65,60,00,000.00</b>
<b>TOTAL PROJECT COST</b>		<b>270,00,00,000.00</b>

# **COST ON CULTIVATION OF MEDICINAL PLANTS**

<b>PARTICULARS</b>	<b>COST</b>
Chopping Machine	1,00,00,000.00
Root Washing Machine	1,00,00,000.00
Solar Water Pumps	75,00,00,000.00
Solar Water Power	50,00,00,000.00
Tractors	17,50,00,000.00
Tillers	1,80,00,000.00
Tools and Equipments	1,00,00,000.00
Fertiliser Spreader	2,50,00,000.00
Drying and Storage Shed	8,50,00,000.00
Fencing	12,50,00,000.00
Working Capital	25,00,00,000.00
<b>Cost for Cultivation of Medicinal Plants</b>	<b>195,80,00,000.00</b>

# 1. MODE OF FINANCING:

MEANS OF FINANCE (Figures in Lacs)			
PARTICULARS	OWN FUND	GRANT FUND	TOTAL
Fixed Assets	7,580.00	9,500.00	17,080.00
Working Capital	2,000.00	500.00	2,500.00
<b>Total Amount Required for Cultivation of Medicinal plants</b>	<b>9,580.00</b>	<b>10,000.00</b>	<b>19,580.00</b>
<b>Cost For Establishing Research Centre</b>		<b>860.00</b>	<b>860.00</b>
<b>Cost for Establishment of Spices and Raw Medicine Extraction Unit</b>		<b>6560.00</b>	<b>6560.00</b>
<b>Net Cost</b>	<b>9,480.00</b>	<b>10860.00</b>	<b>27,000.00</b>

## 2. RATIO ANALYSIS:

From the attached projected financials we can analyze following ratios which measures the profitability, owned and debt fund proportions and effectiveness of working capital management.

Particulars	Projected	Projected	Projected	Projected	Projected
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Profit	11.95%	13.33%	12.84%	12.25%	14.50%
Net Profit	8.81%	10.60%	10.52%	10.28%	12.84%



# **PROJECT FINANCIAL STATEMENT**

TRADING PROFIT&LOSSACCOUNT					(Figures in Lacs)
Income	Projected	Projected	Projected	Projected	Projected
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Revenue From Operations</b>	6,000,000,000.0 0	6,300,000,000.0 0	6,804,000,000.0 0	7,348,320,000.0 0	8,119,890,000.0 0
By Sale of Plants	6,000,000,000.00	6,300,000,000.00	6,804,000,000.00	7,348,320,000.00	8,119,890,000.00
<b>Total</b>	6,000,000,000.0 0	6,300,000,000.0 0	6,804,000,000.0 0	7,348,320,000.0 0	8,119,890,000.0 0
Expenses	Projected	Projected	Projected	Projected	Projected
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Cost of Materials</b>					
To Planting & Seed Material	1,000,000,000.00	750,000,000.00	750,000,000.00	750,000,000.00	750,000,000.00
<b>Manufacturing &amp; Operating Expenses</b>					
To Rental Value of Land	12,500,000.00	12,500,000.00	12,500,000.00	12,500,000.00	12,500,000.00
To Land Preparation	20,000,000.00	22,400,000.00	25,088,000.00	28,098,600.00	31,470,400.00
To Fym/Compost Cost	60,000,000.00	66,000,000.00	72,600,000.00	79,860,000.00	87,846,000.00
To Planting/Sowing	200,000,000.00	220,000,000.00	242,000,000.00	266,200,000.00	292,820,000.00
To Chemical Fertilizer	200,000,000.00	220,000,000.00	242,000,000.00	266,200,000.00	292,820,000.00
To Weeding - Manual	30,000,000.00	33,000,000.00	36,300,000.00	39,930,000.00	43,923,000.00
To Irrigation	600,000,000.00	660,000,000.00	726,000,000.00	798,600,000.00	878,460,000.00
To Harvesting	60,000,000.00	66,000,000.00	72,600,000.00	79,860,000.00	87,846,000.00
To Processing	100,000,000.00	110,000,000.00	121,000,000.00	133,100,000.00	146,410,000.00
To Packing Material, Packing, Loading	40,000,000.00	44,000,000.00	48,400,000.00	53,240,000.00	58,564,000.00
To Wages	2,800,000,000.00	3,080,000,000.00	3,388,000,000.00	3,726,800,000.00	4,024,944,000.00
To Transportation	100,000,000.00	110,000,000.00	121,000,000.00	133,100,000.00	146,410,000.00
To Repairs & Maintenance	500,000.00	550,000.00	605,000.00	665,500.00	732,100.00

To Electricity Charges	60,000,000.00	66,000,000.00	72,600,000.00	79,860,000.00	87,846,000.00
<b>Total</b>	<b>5,283,000,000.00</b>	<b>5,460,450,000.00</b>	<b>5,930,693,000.00</b>	<b>6,448,014,100.00</b>	<b>6,942,591,500.00</b>
<b>Gross Profit</b>	<b>717,000,000.00</b>	<b>839,550,000.00</b>	<b>873,307,000.00</b>	<b>900,305,900.00</b>	<b>1,177,298,500.00</b>
<b>Selling &amp; Administrative Expenses</b>					
To Miscellaneous Expenses	1,000,000.00	1,100,000.00	1,210,000.00	1,331,000.00	1,464,100.00
To Salary	9,125,000.00	10,037,500.00	11,041,300.00	12,145,400.00	13,359,900.00
To Vehicle Expenses	300,000.00	330,000.00	363,000.00	399,300.00	439,200.00
To Insurance	4,000,000.00	4,400,000.00	4,840,000.00	5,324,000.00	5,856,400.00
To Marketing Expenses	500,000.00	550,000.00	605,000.00	665,500.00	732,100.00
To Ware House facilities	2,500,000.00	2,750,000.00	3,025,000.00	3,327,500.00	3,660,300.00
To Depreciation	170,800,000.00	152,572,000.00	136,386,000.00	122,006,000.00	109,222,000.00
<b>Net Profit Before Tax</b>	<b>528,775,000.00</b>	<b>667,810,500.00</b>	<b>715,836,700.00</b>	<b>755,107,200.00</b>	<b>1,042,564,500.00</b>
<b>Net Profit After Tax</b>	<b>528,775,000.00</b>	<b>667,810,500.00</b>	<b>715,836,700.00</b>	<b>755,107,200.00</b>	<b>1,042,564,500.00</b>

BALANCE SHEET					(Figures in Lacs)
LIABILITIES	Projected	Projected	Projected	Projected	Projected
	2019-20	2020-21	2021-22	2022-23	2023-24
Capital	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00
Reserves and Surpluses	779,200,000.00	636,678,000.00	520,047,000.00	419,268,000.00	342,036,500.00
Sundry Creditors	50,000,000.00	55,000,000.00	60,500,000.00	66,550,000.00	73,205,000.00
Grant Received	1,000,000,000.00	1,000,000,000.00	1,000,000,000.00	1,000,000,000.00	1,000,000,000.00
<b>Total</b>	<b>1,830,200,000.00</b>	<b>1,692,678,000.00</b>	<b>1,581,547,000.00</b>	<b>1,486,818,000.00</b>	<b>1,416,241,500.00</b>
ASSETS	Projected	Projected	Projected	Projected	Projected
	2019-20	2020-21	2021-22	2022-23	2023-24
Fixed Assets	1,527,200,000.00	1,374,628,000.00	1,238,242,000.00	1,116,236,000.00	1,007,014,000.00
Cash in Bank	2,500,000.00	2,500,000.00	2,500,000.00	2,500,000.00	2,500,000.00
Cash in Hand	500,000.00	550,000.00	605,000.00	666,000.00	733,000.00
Sundry Debtors	300,000,000.00	315,000,000.00	340,200,000.00	367,416,000.00	405,994,500.00
<b>Total</b>	<b>1,830,200,000.00</b>	<b>1,692,678,000.00</b>	<b>1,581,547,000.00</b>	<b>1,486,818,000.00</b>	<b>1,416,241,500.00</b>

FIXED ASSETS AS ON 31/03/2020						(Figures in Lacs)
Name Of the Asset	Rate	W D V	Addition	Total	Dep.	W D V
Chopping Machine	15.00%	-	10,000,000.00	10,000,000.00	1,500,000.00	8,500,000.00
Root Washing Machine	15.00%	-	10,000,000.00	10,000,000.00	1,500,000.00	8,500,000.00
Solar Water Pumps	10.00%	-	750,000,000.00	750,000,000.00	75,000,000.00	675,000,000.00
Solar Water Power	10.00%	-	500,000,000.00	500,000,000.00	50,000,000.00	450,000,000.00
Tractors	15.00%	-	175,000,000.00	175,000,000.00	26,250,000.00	148,750,000.00
Tillers	10.00%	-	18,000,000.00	18,000,000.00	1,800,000.00	16,200,000.00
Tools and Equipments	10.00%	-	10,000,000.00	10,000,000.00	1,000,000.00	9,000,000.00
Fertiliser Spreader	15.00%	-	25,000,000.00	25,000,000.00	3,750,000.00	21,250,000.00
Drying and Storage Shed	5.00%	-	75,000,000.00	75,000,000.00	3,750,000.00	71,250,000.00
Fencing	5.00%	-	125,000,000.00	125,000,000.00	6,250,000.00	118,750,000.00
<b>Total</b>		-	<b>1,698,000,000.00</b>	<b>1,698,000,000.00</b>	<b>170,800,000.00</b>	<b>1,527,200,000.00</b>

FIXED ASSETS AS ON 31/03/2021						(Figures in Lacs)
Name Of the Asset	Rate	W D V	Addition	Total	Dep.	W D V
Chopping Machine	15.00%	8,500,000.00	-	8,500,000.00	1,275,000.00	7,225,000.00
Root Washing Machine	15.00%	8,500,000.00	-	8,500,000.00	1,275,000.00	7,225,000.00
Solar Water Pumps	10.00%	675,000,000.00	-	675,000,000.00	67,500,000.00	607,500,000.00
Solar Water Power	10.00%	450,000,000.00	-	450,000,000.00	45,000,000.00	405,000,000.00
Tractors	15.00%	148,750,000.00	-	148,750,000.00	22,313,000.00	126,437,000.00
Tillers	10.00%	16,200,000.00	-	16,200,000.00	1,620,000.00	14,580,000.00
Tools and Equipments	10.00%	9,000,000.00	-	9,000,000.00	900,000.00	8,100,000.00
Fertiliser Spreader	15.00%	21,250,000.00	-	21,250,000.00	3,188,000.00	18,062,000.00
Drying and Storage Shed	5.00%	71,250,000.00	-	71,250,000.00	3,563,000.00	67,687,000.00
Fencing	5.00%	118,750,000.00	-	118,750,000.00	5,938,000.00	112,812,000.00
<b>Total</b>		<b>1,527,200,000.00</b>	<b>-</b>	<b>1,527,200,000.00</b>	<b>152,572,000.00</b>	<b>1,374,628,000.00</b>

FIXED ASSETS AS ON 31/03/2022						(Figures in Lacs)
Name Of the Asset	Rate	W D V	Addition	Total	Dep.	W D V
Chopping Machine	15.00%	7,225,000.00	-	7,225,000.00	1,084,000.00	6,141,000.00
Root Washing Machine	15.00%	7,225,000.00	-	7,225,000.00	1,084,000.00	6,141,000.00
Solar Water Pumps	10.00%	607,500,000.00	-	607,500,000.00	60,750,000.00	546,750,000.00
Solar Water Power	10.00%	405,000,000.00	-	405,000,000.00	40,500,000.00	364,500,000.00
Tractors	15.00%	126,437,000.00	-	126,437,000.00	18,966,000.00	107,471,000.00
Tillers	10.00%	14,580,000.00	-	14,580,000.00	1,458,000.00	13,122,000.00
Tools and Equipments	10.00%	8,100,000.00	-	8,100,000.00	810,000.00	7,290,000.00
Fertiliser Spreader	15.00%	18,062,000.00	-	18,062,000.00	2,709,000.00	15,353,000.00
Drying and Storage Shed	5.00%	67,687,000.00	-	67,687,000.00	3,384,000.00	64,303,000.00
Fencing	5.00%	112,812,000.00	-	112,812,000.00	5,641,000.00	107,171,000.00
<b>Total</b>		<b>1,374,628,000.00</b>	<b>-</b>	<b>1,374,628,000.00</b>	<b>136,386,000.00</b>	<b>1,238,242,000.00</b>

FIXED ASSETS AS ON 31/03/2023						(Figures in Lacs)
Name Of the Asset	Rate	W D V	Addition	Total	Dep.	W D V
Chopping Machine	15.00%	6,141,000.00	-	6,141,000.00	921,000.00	5,220,000.00
Root Washing Machine	15.00%	6,141,000.00	-	6,141,000.00	921,000.00	5,220,000.00
Solar Water Pumps	10.00%	546,750,000.00	-	546,750,000.00	54,675,000.00	492,075,000.00
Solar Water Power	10.00%	364,500,000.00	-	364,500,000.00	36,450,000.00	328,050,000.00
Tractors	15.00%	107,471,000.00	-	107,471,000.00	16,121,000.00	91,350,000.00
Tillers	10.00%	13,122,000.00	-	13,122,000.00	1,312,000.00	11,810,000.00
Tools and Equipments	10.00%	7,290,000.00	-	7,290,000.00	729,000.00	6,561,000.00
Fertiliser Spreader	15.00%	15,353,000.00	-	15,353,000.00	2,303,000.00	13,050,000.00
Drying and Storage Shed	5.00%	64,303,000.00	-	64,303,000.00	3,215,000.00	61,088,000.00
Fencing	5.00%	107,171,000.00	-	107,171,000.00	5,359,000.00	101,812,000.00
<b>Total</b>		<b>1,238,242,000.00</b>	<b>-</b>	<b>1,238,242,000.00</b>	<b>122,006,000.00</b>	<b>1,116,236,000.00</b>



FIXED ASSETS AS ON 31/03/2024						(Figures in Lacs)
Name Of the Asset	Rate	W D V	Addition	Total	Dep.	W D V
Chopping Machine	15.00%	5,220,000.00	-	5,220,000.00	783,000.00	4,437,000.00
Root Washing Machine	15.00%	5,220,000.00	-	5,220,000.00	783,000.00	4,437,000.00
Solar Water Pumps	10.00%	492,075,000.00	-	492,075,000.00	49,208,000.00	442,867,000.00
Solar Water Power	10.00%	328,050,000.00	-	328,050,000.00	32,805,000.00	295,245,000.00
Tractors	15.00%	91,350,000.00	-	91,350,000.00	13,703,000.00	77,647,000.00
Tillers	10.00%	11,810,000.00	-	11,810,000.00	1,181,000.00	10,629,000.00
Tools and Equipments	10.00%	6,561,000.00	-	6,561,000.00	656,000.00	5,905,000.00
Fertiliser Spreader	15.00%	13,050,000.00	-	13,050,000.00	1,958,000.00	11,092,000.00
Drying and Storage Shed	5.00%	61,088,000.00	-	61,088,000.00	3,054,000.00	58,034,000.00
Fencing	5.00%	101,812,000.00	-	101,812,000.00	5,091,000.00	96,721,000.00
<b>Total</b>		<b>1,116,236,000.00</b>	<b>-</b>	<b>1,116,236,000.00</b>	<b>109,222,000.00</b>	<b>1,007,014,000.00</b>

# COST ON ESTABLISHMENT OF RESEARCH CENTRE

Sl No	Item	Budget Year-wise	
	<b>Plan</b>	2019-20 ,2020-21	Total
1	Construction of Laboratory ( 5000 sqft)	15000000 (Rs 3000/ sqft)	1,50,00,000.00
2	Construction of Poly house and development of farms	50,00,000.00	50,00,000.00
3	Purchase of Furniture, Equipments, Instruments etc.	1,00,00,000.00	1,00,00,000.00
4	Construction of Hostel, Seminar hall, Guest house etc.	2,00,00,000.00	2,00,00,000.00
5	Overhead charges	50,00,000.00	50,00,000.00
6	Infrastructure	50,00,000.00	50,00,000.00
	<b>Salaries &amp; wages</b>		
1	Salary/wages	2,50,00,000.00	2,50,00,000.00
<b>Grand Total</b>			<b>8,50,00,000.00</b>

# COST OF ESTABLISHMENT OF SPICES AND RAW MEDICINE EXTRACTION UNIT

PROJECT REPORT – EXCECUTUVE SUMMARY		
I	<b>Name of the Project</b>	Extraction of spices such as Turmeric, Ginger, Cardamom, Pepper, Nutmeg etc. and sell
2	<b>Capacity of the Project</b>	29MT per day raw materials can be processed
3	<b>Type of Industry</b>	Manufacturing
4	<b>Proposed fixed Assets – Annex I</b>	Rs. 45.18 cr
5	<b>Proposed working capital – Annex II</b>	Rs. 20.42 cr
5	<b>Total fund required Annex -III</b>	<b>Rs. 65.60 cr</b>
5	<b>Sales revenue Rs. In Lacs – Annex IV &amp; V</b>	Rs. 98.69 cr, 101.32, 103.95, 106.59,109.20,111.80,114.50,114.50 from 1 <sup>st</sup> year ro 8 <sup>th</sup> year.
6	<b>Working and Profitablity – GP before Dpn &amp; Interest - Annex IV &amp; V</b>	Rs. 25.44 cr, 26.20, 26.96, 27.72, 28.47, 29.23, 29.99, from 1 <sup>st</sup> year to 8 <sup>th</sup> year
7	<b>Net Profit – Annexure IV &amp; V</b>	Rs. 12.78 cr, 13.98, 15.12, 16.19, 17.22, 18.20, 19.15, 19.48 from 1 <sup>st</sup> year to 8 <sup>th</sup> year.
8	<b>Repayment Schedule and Debt Servicing cover Ratio – Annex VIII</b>	
9	<b>Interest Coverage</b>	
10	<b>Notes on working &amp; Profitability Annexure VI</b>	

<b>Sl. No.</b>	<b>Particulars</b>	<b>Amount Rs.in Cr</b>
<b>1</b>	<b>LAND DEVELOPMENT – Not considered as of now</b>	
<b>2</b>	<b>BUILDINGS( FACTORY ) 35000 sq.ft. @ Rs. 1300/- per sq.ft.</b>	<b>4.55</b>
<b>3</b>	<b>PLANT &amp; MACHINERY (29 MT/day @ Rs.1.35 cr per MT)</b>	<b>39.15</b>
<b>4</b>	<b>LAB EQUIPMENTS (GC,HPLC etc)</b>	<b>1.18</b>
<b>5</b>	<b>OFFICE EQUIPMENTS &amp; FURNISHING (5000 sq.ft) for 25 manpower</b>	<b>0.25</b>
<b>6</b>	<b>PRELIMINARY &amp; PRE-OPERATIVE EXPENSES</b>	<b>0.05</b>
	<b>TOTAL</b>	<b>45.18</b>
	<b><u>MEANS OF FINANCE</u></b>	
<b>1</b>	<b>PROMOTERS CONTRIBUTION</b>	
<b>2</b>	<b>TERM LOAN FROM BANK</b>	
	<b>TOTAL</b>	

<b>WORKING CAPITAL - 2 Months blocked</b>	
	<b>Rs. in cr</b>
<b>Raw material</b>	<b>14.35</b>
<b>Other variable exp</b>	<b>5.74</b>
<b>Fixed overheads</b>	<b>0.33</b>
<b>Total for WC</b>	<b>20.42</b>

<b>Total Capital Required</b>	
	<b>Rs.in cr.</b>
<b>Working capital</b>	<b>20.42</b>
<b>Fixed cost for infrastrucure</b>	<b>45.18</b>
<b>Total Capital Required</b>	<b>65.60</b>

Projected Profit & Loss Account								
Particulars	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year
Installed Capacity 29 MT day/330 working days in a year (in Kgs)	9,570,000	9,570,000	9,570,000	9,570,000	9,570,000	9,570,000	9,570,000	9,570,000
Production achieved in kgs	7,177,500	7,368,900	7,560,300	7,751,700	7,943,100	8,134,500	8,325,900	8,325,900
Sales Revenue	986,906,250	1,013,223,750	1,039,541,250	1,065,858,750	1,092,176,250	1,118,493,750	1,144,811,250	1,144,811,250
Expenditure- RM Variable	645,975,000	663,201,000	680,427,000	697,653,000	714,879,000	732,105,000	749,331,000	749,331,000
Expenditure-Other variable	86,130,000	88,426,800	90,723,600	93,020,400	95,317,200	97,614,000	99,910,800	99,910,800
Expenditure-Fixed cost	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000
Profit after Variable costs & Fixed costs	224,801,250	231,595,950	238,390,650	245,185,350	251,980,050	258,774,750	265,569,450	265,569,450
Duty back etc @ 3%	29,607,188	30,396,713	31,186,238	31,975,763	32,765,288	33,554,813	34,344,338	34,344,338
Profit before Depreciation,Interest & Taxes	254,408,438	261,992,663	269,576,888	277,161,113	284,745,338	292,329,563	299,913,788	299,913,788
PBDIT % on Sales	25.78	25.86	25.93	26.00	26.07	26.14	26.20	26.20
Depreciation	84,000,000	75,600,000	68,040,000	61,236,000	55,112,400	49,601,160	44,641,044	40,176,940
Profit before tax	170,408,438	186,392,663	201,536,888	215,925,113	229,632,938	242,728,403	255,272,744	259,736,848
Provision for tax	42,602,109	46,598,166	50,384,222	53,981,278	57,408,234	60,682,101	63,818,186	64,934,212
Profit after tax, transferred to Balance Sheet	127,806,328	139,794,497	151,152,666	161,943,834	172,224,703	182,046,302	191,454,558	194,802,636
Net profit % on Sales value	13.0	13.8	14.5	15.2	15.8	16.3	16.7	17.0

Capacity considered from 75% in first year onwards								
<b>FUND AVAILABLE FROM OPERATIONS</b>								
<b>Net profit</b>	<b>127,806,328</b>	<b>139,794,497</b>	<b>151,152,666</b>	<b>161,943,834</b>	<b>172,224,703</b>	<b>182,046,302</b>	<b>191,454,558</b>	<b>194,802,636</b>
<b>Depreciation</b>	<b>84,000,000</b>	<b>75,600,000</b>	<b>68,040,000</b>	<b>61,236,000</b>	<b>55,112,400</b>	<b>49,601,160</b>	<b>44,641,044</b>	<b>40,176,940</b>
<b>Total</b>	<b>211,806,328</b>	<b>215,394,497</b>	<b>219,192,666</b>	<b>223,179,834</b>	<b>227,337,103</b>	<b>231,647,462</b>	<b>236,095,602</b>	<b>234,979,576</b>

PROJECTED OVER ALL PERFORMANCE FOR 8 YEARS (Rs. In Crore)								
Particulars	1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year
<b>Sales (INR In Crore)</b>	<b>98.69</b>	<b>101.32</b>	<b>103.95</b>	<b>106.59</b>	<b>109.2</b>	<b>111.8</b>	<b>114.5</b>	<b>114.5</b>
<b>Gross Profit (INR in Crore)</b>	<b>25.44</b>	<b>26.2</b>	<b>26.96</b>	<b>27.72</b>	<b>28.47</b>	<b>29.23</b>	<b>29.99</b>	<b>29.99</b>
<b>Percentage on Sales</b>	<b>25.8%</b>	<b>25.9%</b>	<b>25.9%</b>	<b>26.0%</b>	<b>26.1%</b>	<b>26.1%</b>	<b>26.2%</b>	<b>26.2%</b>
<b>Net Profit (INR in Crore)</b>	<b>12.78</b>	<b>13.98</b>	<b>15.12</b>	<b>16.19</b>	<b>17.22</b>	<b>18.20</b>	<b>19.15</b>	<b>19.48</b>
<b>Percentage on Sales</b>	<b>13.0%</b>	<b>13.7%</b>	<b>14.5%</b>	<b>15.2%</b>	<b>15.8%</b>	<b>16.3%</b>	<b>16.7%</b>	<b>17.0%</b>

# KARSHAKA PROJECT

“Project Proposal On Cultivation Of Medicinal Plants  
In Attappady For The Sustainable Livelihood  
Of Tribal People”



## LEGAL DOCUMENTS & IT RETURNS



HRDS INDIA  
HRDS INDIA

(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)  
DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD DIST, KERALA, INDIA - 678 007





# **EMBLUM**

## **CERTIFICATE OF REGISTRATION OF SOCIETIES**

(Act XII of the Travancore – Cochin Literary, Scientific and Charitable Societies  
Registration Act, 1955)

Serial No: **1-170/97**

Year: 1997

It is certified that **The Highrange Rural Development Society, Kattappana** is registered today under Act XII of the Travancore – Cochin Literary, Scientific and Charitable Societies Registration Act, 1955.

Signed by me on this the 13<sup>th</sup> day of August 1997

The seal of the  
Registrar of Idukki

Sd/-  
Registrar of Societies

Registered

N0.II/21022/65(13)/2002-FCRA-III  
Government of India/Bharat Sarkar  
Ministry of Home Affairs/Grih Mantralaya

\*\*\*\*

1st Floor, Room No.20,  
Lok Nayak Bhavan,  
New Delhi-110003  
Dated, the

15 MAY 2002

To

The Chief Functionary,  
The Highrange Rural Development Society  
Kattappana P.O.,  
Kattappana,  
Idukki (Kerala) - 685508

Subject: Registration under Foreign Contribution (Regulation) Act, 1976.

Sir/Madam,

With reference to your application dated 28/01/2002 requesting registration under the Foreign Contribution(Regulation)Act, 1976. I am directed to say that your Association has been registered under Section 6 (1) (a) of the Act and allotted the following Registration Number:-

**052940065**

2. You are advised to send intimations within the prescribed time to the Central Government of the amounts of each foreign contribution received by you, the source and the manner in which the foreign contribution was utilised, as per the provisions of the FC(R) Act, 1976 and the rules framed thereunder. An association is required to furnish the return even when the particulars are 'NIL'. The Bank Account mentioned in your application should be used for receiving foreign contribution and no other amount should be credited to this account. The Association should immediately intimate to this Ministry and obtain written confirmation regarding any change in the name of the Association, its address and Bank/Bank Account.
3. In case the association brings out any publication(registered under PRB Act, 1867) or acts as correspondent, columnist, editor, printer or publisher of a registered newspaper at a later stage thereby attracting provisions of the Section 4(1) (b) of the FC(R) Act, 1976, this fact should be reported to the Ministry immediately,
4. You should also ensure before any funds are passed on to any person/association in India that the recipient is (i) eligible to accept foreign contribution under the Act, i.e., recipient association is registered under the Act, or has obtained Prior Permission of the Government under Section 6 of the Act, and ( ii ) the person/association is not prohibited under Section 4 of the Act.



5. Failure to comply with any of the above provisions will make you liable for action under the provisions to Section 6(1) and/or under Section 23(1) of the Foreign Contribution (Regulation) Act, 1976.

Yours faithfully

A.K. Ajmani  
14/1/2002

(Ashok Ajmani)

Under Secretary to the Govt. of India

Tel. No. 4698251

(ASHOK AJMANI)

Under Secretary  
Ministry of Home Affairs  
New Delhi.

No.11/21022/(65(13)/2002)-FCRA-III

Copy to:

The Manager  
State Bank of India  
Idukki,  
Kerala

With the request to confirm that SB/CA Account no. 8097 has been opened by the above association exclusively for receiving foreign contribution. The Bank is also requested to send intimations regarding inward remittances received by the association to the Ministry on yearly basis.

(Ashok Ajmani)

Under Secretary to the Govt. of India

Tel. No. 4698251

**PROCEEDINGS OF THE COMMISSIONER OF INCOME TAX, KOCHI.**  
**(INDRA KUMAR)**  
**Commissioner of Incometax**

- |                        |  |
|------------------------|--|
| 1. File No.            | : CIT/CHN/12A/Tech-75/2001-02  |
| 2. Name & address      | : The Highrange Rural Development<br>Society(HRDS), Kattappana P.O.,<br>Idukki District, Kerala. |
| 3. Date of application | : 28.02.2002   |
| 4. Date of order       | : 14.01.2004.  |

**ORDER UNDER SECTION 12AA OF THE I.T.ACT,1961**

The Highrange Rural Development Society(HRDS), was originally constituted as per the Memorandum of Association dated 13.08.1997. An application for registration u/s.12AA was filed by the Society on 11.03.2002. The Society also filed a petition dated 4.3.2002 for condonation of delay along with the application. This application is delayed by more than 3 years. Considering the reasons given in the application for condonation of delay, the delay in filing the application is condoned.

2. The Society is registered u/s.12AA of the I.T.Act and its name is entered at CIT/CHN/12A/Tech.75/2001-02 in the register of application under section 12AA maintained in this office, as a Charitable Society.
3. Amendment made to the Trust Deed/Memorandum, Rules and Regulations if any, should be intimated to the Commissioner of Income Tax, forthwith.
4. This certificate is not a finding regarding the charitable nature of the Trust.

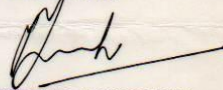


To  
The President,  
The Highrange Rural Development  
Society(HRDS), Kattappana P.O.,  
Idukki District, Kerala.

Sd/-  
( INDRA KUMAR )  
Commissioner of Income Tax, Cochin.

Copy to:

1. The Income Tax Office, Ward-2, Thodupuzha.
2. The Addl. Commissioner of Income Tax, Range-1, Ernakulam.
3. The Chief Commissioner of Income Tax, Cochin.

  
( R. MUTHULAKSHMY )  
Income Tax Officer(Tech)





OFFICE OF THE  
**COMMISSIONER OF INCOME TAX**  
C.R.Building, I.S.Press Road, Cochin-18.

CIT/CHN/12A/Tech.75/2001-02

Dated: 30.05.2007

To  
The President,  
The Highrange Rural Development Soceity,  
XIII/1028, Kattappana Panchayat,  
Kattappana South P.O., Idukki District.

Sir,

Sub:- Renewal of exemption U/s 80G(5)(vi) of the I.T.Act -  
Donation made to The Highrange Rural Development Soceity  
Ref:- Your application dated 10.2.2007.

.....

Exemption U/s 80G(5)(vi) of the Income Tax Act,1961 granted vide this office order No.CIT/CHN/12A/Tech.75/2001-02 dated 2.11.2005 in respect of donations made to The Highrange Rural Development Soceity is hereby renewed for a further period of three years.

This exemption certificate will cover only donations made during the period from 1.4.2007 to 31.3.2010 relevant to the assessment years 2008-09, 2009-2010 and 2010-2011.

Yours faithfully,



Sd/-  
PRAKASH H ADNUR  
Commissioner of Income Tax, Cochin.

Note:

1. Receipts issued to the donors should bear the No. and date of order. The validity of this certificate as stated in para 2 above should also be mentioned in the receipt.
2. Statement of accounts required is of receipts and expenditure and the same should be submitted annually to the ADIT(Exem), Ernakulam.
3. If any renewal is required, an application has to be made to this office through the ADIT(Exem), Ernakulam with statement of accounts of receipts and expenditure.

Copy to:

1. The DDIT, Range-2, EKM. His attention is invited to the Board's Instruction No.38 F.No.2/3/69-I dated 18.4.1966 communicated in this office endst.S.F.58/23/69-70 dt. 31.5.69 .He is requested to verify and satisfy himself with reference to the annual statements that will be submitted by the Trust/Society, that it continues to fulfill the conditions laid down in Section 80G(5)(vi) and send a report, if it applies for renewal.
2. The Jt. DIT, Range-2, Ernakulam.
3. The Chief Commissioner of Income Tax, Cochin.

(C.B. SURESH KUMAR)  
Income Tax Officer(Tech)

For Commissioner of Income Tax , Cochin.





## Income Tax Department

Department of Revenue, Ministry of Finance, Government of India

### CIRCULAR

#### INCOME-TAX ACT

*Section 10(23C)(iv) of the Income-tax Act, 1961 - Exemptions - Charitable or religious trusts/institutions - Clarification regarding period of validity of approvals issued under section 10(23C)(iv), (v), (vi) or (via) and section 80G(5) of the Income-tax Act*

CIRCULAR NO. 7/2010 [F. NO. 197/21/2010-ITA-I], DATED 27-10-2010

As regards approvals granted upto 1-10-2009 under section 80G by the Commissioners of Income-tax/Directors of Income-tax, proviso to **section 80G(5)(vi)** clarified that any approval shall have effect for such assessment year or years not exceeding five assessment years as may be specified in the approval. The above proviso was deleted by the Finance (No. 2) Act, 2009. The intent behind the deletion of above proviso as explained in the explanatory memorandum to Finance (No. 2) Bill, 2009 was as under :

“Further as per clause (vi) of sub-section (5) of section 80G of the Income-tax Act, 1961, the institutions or funds to which the donations are made have to be approved by the Commissioner of Income-tax in accordance with the rules prescribed in rule 11AA of the Income-tax Rules, 1962. The proviso to this clause provides that any approval granted under this clause shall have effect for such assessment year or years, not exceeding five assessment years, as may be specified in the approval.

Due to this limitation imposed on the validity of such approvals, the approved institutions or funds have to bear the hardship of getting their approvals renewed from time to time. This is unduly burdensome for the *bona fide* institutions or funds and also leads to wastage of time and resources of the tax administration in renewing such approvals in a routine manner.

*Therefore, it is proposed to omit the proviso to clause (vi) of sub-section (5) of section 80G to provide that the approval once granted shall continue to be valid in perpetuity. Further, the Commissioner will also have the power of withdraw the approval if the Commissioner is satisfied that the activities of such institution or fund are not genuine or are not being carried out in accordance with the objects of the institution or fund. This amendment will take effect from 1st day of October, 2009. Accordingly, existing approvals expiring on or after 1st October, 2009 shall be deemed to have been extended in perpetuity unless specifically withdrawn. a€□*

It appears that some doubts still prevail about the period of validity of approval under section 80G subsequent to 1-10-2009, especially in view of the fact that no corresponding change has been made in Rule 11A(4). To remove any doubts in this regard, it is reiterated that any approval under section 80G(5) on or after 1-10-2009 would be a one time approval which would be valid till it is withdrawn.

By order

Taxation Laws (Amendment)

Government of India





GOVERNMENT OF INDIA  
OFFICE OF THE COMMISSIONER OF INCOMETAX(EXEMPTIONS)  
2<sup>nd</sup> Floor, San Juan Towers, Old Railway Station Road, Kochi- 682018.

F. No. CIT(E)/CHN/80G/2017-18

Dated: 12<sup>th</sup> February, 2018

To

The Founder Secretary,  
The Highrange Rural Development Society,  
Kattappana – 685 515,  
Idukki District.

Sir,

Sub: Request for clarification regarding continuation of approval u/s 80G of the  
Income Tax Act - Regarding -

Ref: 1. Your letter dated 12/02/2018  
2. CBDT's Circular No.7/2010 in F.No.197/21/2010-ITA-I dated 27-10-2010.

Please refer to the above.

2. Vide para 5 of CBDT's Circular cited above, clarification has been issued to the effect that as regards existing approvals expiring on or after 01-10-2009 granted u/s 80G by the Commissioners of Income Tax / Directors of Income Tax shall be deemed to have been extended in perpetuity unless specifically withdrawn.

3. Since in your case the last approval u/s 80G(5)(vi) of the Income Tax Act was granted by the Commissioner of Income Tax, Cochin vide order No.CIT/CHN/12A/Tech-75/2001-02 dated 30/05/2007 expires on 31-03-2010, there is no need for fresh renewal. Your letter dated on 12/02/2018 stands disposed accordingly.



Yours faithfully,

( P.A. Manikantan Nair )  
Income Tax Officer (Hq.) (Exemptions),  
For Commissioner of Income Tax (Exemptions), Kochi.

**INCOME TAX PAN SERVICES UNIT**  
(Managed by Unit Trust of India Investor Services Ltd.)  
Plot No. 3, Sector 11, Post Bag No. 20, CBD Belapur,  
Navi Mumbai - 400 614.

The Income Tax Department takes pleasure in informing that the PAN allotted to you is :

**AAAJH0168A**

and the PAN card is enclosed herewith. Further, for filing the return of income, please contact

**ITO WD-2 THODUPUZZHA**

Quoting of PAN on return of income and challans for payment of taxes is necessary to ensure accurate **credit of taxes paid by you and faster processing** of return of income. Moreover, quoting PAN on all other communications with the department will help to improve taxpayer services.

We may inform that it is **mandatory to quote PAN** in several transactions specified under the Income Tax Act, 1961. For further details of such transactions, reference is invited to rule 114B of the Income Tax Rules, 1962 read with section 139A of the Income Tax Act, 1961.

In the unlikely event of **more than one PAN being allotted**, this fact should be brought to the notice of your Assessing Officer, as **possessing or using more than one PAN is against law** and may attract **penalty of up to Rs. 10,000/-**.

Any errors in the data printed on your PAN Card may be brought to the notice of IT PAN Services Unit at the address given above and on the reverse of the PAN Card.

BundleID: UPC2280 / DespatchID :15438235  
M/s HIGHRANGE RURAL DEV SOCTY  
HIGHRANGE RURAL DEVELOPEMENT S  
1/776  
KATTAPPANA VILLAGE  
UDAMBANCHOLA  
IDUKKI  
KERALA 685508  
PHONE : 250180

Income Tax Department



(This being a computer-generated letter, no signatures are required)





# National Securities Depository Limited

1st Floor, Times Tower, Kamala Mills Compound, Senapati Bapat Marg, Lower Parel, Mumbai - 400 013  
Tel: 91-22-2499 4650, Fax : 91-22-2495 0664, e-mail: [tininfo@nsdl.co.in](mailto:tininfo@nsdl.co.in)

## e-TDS Intermediary

PkgID : 00329 / TANPTGNTPO1010903

TPUC/PSTU

Jan 01, 2009



Ref. No: 61520100119061171/TAN/NEW

TO,  
HIGHRANGE RURAL DEVELOPMENT SOCIETY  
CHURCH BUILDING,  
KATTAPPANA SOUTH PO, KATTAPPANA,  
IDUKKI,  
KERALA-685515  
TEL. NO.:4868-250180

Sir/Madam,

Sub : Allotment of Tax Deduction Account Number (TAN)  
as per the Income Tax Act, 1961.

Kindly refer to your application (Form 49B) dated Dec 20, 2008 for allotment of Tax Deduction Account Number. In this connection, the following TAN has been issued to you/your organisation :

**CHNH00739E**

Please quote the same in all TDS challans, TDS certificates, TDS returns, Tax Collection at Source (TCS) returns as well as other documents pertaining to such transaction.

Quoting of TAN on all TDS returns and challans for payment of TDS is necessary to ensure credit of TDS paid by you and faster processing of TDS returns.

The above TAN should also be used as Tax collection at Source Account Number under Section 206CA.

Kindly note that it is mandatory to quote TAN while furnishing TDS returns, including e-TDS returns. e-TDS return will not be accepted if TAN is not quoted.

This supersedes all the TAX Deduction/Collection Account Number, allotted to you earlier.

Income Tax Department

This is a computer-generated letter. Hence, signature is not required.





DARPAN

NITI Aayog, Government of India

You Are Here:- Home » NGO Details

Index | Back | [Print](#)

## NGO Details

NGO Name : HRDS INDIA THE  
HIGH RANGE RURAL  
DEVELOPMENT SOCIETY

Unique Id of VO/NGO : KL/2016/0109581  
 PAN Status : **Pan uploaded & Verified**  
 Chief Functionary : Aji Krishnan  
 Chairman : Dr S KrishnaKumar IAS Rtd  
 Secretary : Aji Krishnan

## First Registration Details

Registered With : Registrar of Societies  
 Type of NGO : Society  
 Registration No : I-170/97  
 City of Registration : Idukki  
 State of Registration : Kerala  
 Date of Registration : 18-08-1997  
 Copy of Registration Certificate : Available

## FCRA details

FCRA Registration no. : 052940065

## Sector/ Key Issues

Key Issues : Tribal Affairs, Women's Development & Empowerment  
 Operational Area-States : Kerala, Tamil Nadu  
 Operational Area-District : Idukki, Palakkad, Wayanad, Coimbatore, Kanyakumari, Tirunelveli

## Details of Achievements :

HRDS INDIA (The Highrange Rural Development Society) is registered NGO working for the development of Rural and Tribal people in Kerala and Tamilnadu state in India. Our mission is to promote all aspect of Tribal and Rural development throughout India. HRDS INDIA formed in the year 1997 and registered under Travancore-Cochin Literary, Scientific and Charitable Societies Registration Act 1955. We are granted with Certificates U/S 12 AA and 80G 5 & VI of the IT Act. We are also having FCRA registration. Our president was former Union Minister DR.S.Krishna kumar IAS (Rtd). Since its formation HRDS INDIA has involved with participated in contemporary social activities

## NGO Directory

List of VOs/NGOs signed up on the NGO-DARPAN

- ✚ State-wise
- ✚ State-wise (with PAN)
- ✚ Sector-wise
- ✚ Search
- ✚ FAQs

## Guidelines

- ✚ Common Guidelines for Implementation of Centrally Sponsored Schemes (CSS)/ Central Sector (CS) Schemes through NGOs
- ✚ Report

## Related Websites

- ✚ [NITI Aayog](#)
- ✚ [Ministry of Electronics & IT \(MeitY\)](#)



**Major  
Activities/Achievements**

and was instrumental in social problems faced by the underprivileged people. We have rendered services to all irrespective of caste, creed, region and politics and proved its live participation. Mainly we concentrate projects on Tribal development, Housing projects, Sustainable Sericulture, Micro Credit and Savings, Promotion of SHG s, Education, Health, Promotion of Medicinal Plants, Natural Calamities etc. HRDS INDIA has been also responding to meet emergency needs of people in distress caused due to Health reason or Nature Disasters etc. And also strengthen the society by the way of spirituality. The mission before HRDS INDIA is to alleviate Poverty, Promote Health, ensure a Clean Environment, Spread Education, Empower Women, Tribal Inhabitation, and create opportunities for Employment and Income Generation for the poor. We strive to accomplish these objectives by designing and implementing several innovative and bold solutions that should bring about a long-term sustainable change in the lives of the poor.

**Contact Details****Address**

HRDS INDIA (The Highrange Rural Development Society)  
: Sowparnika, Marutharoad Post,  
Chandranagar, Palakkad-  
678007, Kerala State India.

**City**

: Palakkad

**State**

: Kerala

**Telephone**

: 0491-2572576

**Mobile No**

: 9446488457

**E-mail**

: [ajihdrs\[at\]gmail\[dot\]com](mailto:ajihdrs[at]gmail[dot]com)

**Website Url**

: <http://www.hrdsindia.org>

[Home](#) | [About the Portal](#) | [Site Map](#) | [Link to Us](#) | [Add to Favorites](#) | [Suggest to a Friend](#) | [Help](#) | [Terms of Use](#) | [Contact Us](#)

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## ANERT

Agency for Non-Conventional Energy & Rural Technology  
(Established by Government of Kerala)

### TO WHOMSOEVER IT MAY CONCERN.

Sir,

*Sub: National Biomass Resource Assessment Programme of MNES, Govt. of India- Engagement of Consultants- reg.*

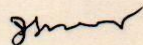
Ministry of Non-Conventional Energy Sources (MNES), Govt. of India have sanctioned a project for assessing the Biomass Resources of selected Taluks under the National Programme. Five study projects have been sanctioned to Kerala under this programme. Each study involves survey of surplus availability of major biomass residues within the Taluk and analysis of data. This study is intended to establish the surplus quantity and quality of biomass availability of the location after use by the local population for its various activities. ANERT, being the nodal agency of MNES, is entrusted to carryout this programme in the State by engaging consultants.

We have identified five Taluks for conducting these studies and decided to award the works to selected consultants as detailed below.

Sl No	Name of Taluk	District	Name of consultant
1	Eranadu	Malappuram	High range Rural Development Society, Kattappana, Idukki
2	Chavakkad	Trissur	Darsana Social Service Charitable Society, Kottayam
3	Meenachil	Kottayam	Darsana Social Service Charitable Society, Kottayam
4	Chertala	Alappuzha	M/s Peldrive Power Controls Pvt.Ltd Thiruvananthapuram
5	Kollam	Kollam	M/s Peldrive Power Controls Pvt.Ltd Thiruvananthapuram

In this connection I request that necessary help may please be extended to the representatives of the above consultants for the successful and timely completion of the programme.

Trivandrum,  
02-07-2001

  
SCIENTIST-E

Dr. D. SUBHAKAR  
Scientist - F  
ANERT  
Thiruvananthapuram

## NEHRU YUVA KENDRA - IDUKKI

Ministry of Youth Affairs and Sports, Govt. of India

GRAM : YUVAKENDRA

KERALA ZONE

Phone : 222670

No.

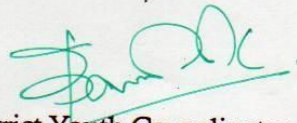
446

### **AFFILIATION CERTIFICATE**

*This is to certify that THE HIGH RANGE RURAL DEVELOPMENT  
SOCIETY (HRDS), CHURCH BUILDING,  
PALNKKAYALA, KATTAPPANA SOUTH P.O.  
is affiliated to Nehru Yuva Kendra Idukki and the Affiliation  
Number is 2919/06*

Thodupuzha,  
Date 11.8.2006



  
District Youth Co-ordinator  
Nehru Yuva Kendra  
Idukki - Kerala



## PAN CARD OF SOCIETY



**PAN CARD OF HRDS INDIA  
FOUNDER-SECRETARY**



# IT RETURNS

<b>INDIAN INCOME TAX RETURN ACKNOWLEDGEMENT</b> <small>[Where the data of the Return of Income in Form ITR-1 (SAHAJ), ITR-2, ITR-3, ITR-4, ITR-5, ITR-6, ITR-7 transmitted electronically with digital signature]</small>						Assessment Year <b>2018-19</b>		
PERSONAL INFORMATION AND THE DATE OF ELECTRONIC TRANSMISSION	Name <b>HIGHRANGE RURAL DEV SOCTY</b>					PAN <b>AAAJH0168A</b>		
	Flat/Door/Block No <b>XIV/273</b>		Name Of Premises/Building/Village			Form No. which has been electronically transmitted <b>ITR-7</b>		
	Road/Street/Post Office <b>NEAR POST OFFICE</b>		Area/Locality <b>CHANDRA NAGAR</b>					
	Town/City/District <b>PALAKKAD</b>		State <b>KERALA</b>		Pin/ZipCode <b>678007</b>			
	Designation of AO(Ward/Circle) <b>WARD -I &amp; TPS, THODUPUZZHA</b>					Status <b>AOP/BOI</b>		
	E-filing Acknowledgement Number <b>319932721031018</b>					Original or Revised <b>ORIGINAL</b>		
						Date(DD/MM/YYYY) <b>03-10-2018</b>		
	COMPUTATION OF INCOME AND TAX THEREON	1 Gross total income					1	0
		2 Deductions under Chapter-VI-A					2	0
		3 Total Income					3	0
3a Current Year loss, if any					3a	0		
4 Net tax payable					4	0		
5 Interest and Fee Payable					5	0		
6 Total tax, interest and Fee payable					6	0		
7 Taxes Paid		a Advance Tax	7a	0				
		b TDS	7b	351538				
		c TCS	7c	0				
	d Self Assessment Tax	7d	0					
	e Total Taxes Paid (7a+7b+7c +7d)							
8 Tax Payable (6-7e)					7e	351538		
9 Refund (7e-6)					8	0		
10 Exempt Income					9	351540		
					10	0		

This return has been digitally signed by AJI KRISHNAN in the capacity of SECRETARY

having PAN ASNPA3175F from IP Address 112.133.229.118 on 03-10-2018 at PALAKKAD

Dsc SI No & issuer 2317103975393952573CN=SafeScript sub-CA for RCAI Class 2 2014,OU=Sub-CA,O=Sify Technologies Limited,C=IN

DO NOT SEND THIS ACKNOWLEDGEMENT TO CPC, BENGALURU



A.Y. 2018-2019

Name : Highrange Rural Dev Socty

P. Y. : 2017-2018

Address : XIV/273  
NEAR POST OFFICE  
CHANDRA NAGAR, PALAKKAD - 678 007

P.A.N. : AAAJH 0168 A

D.O.F. : 13-Aug-1997

Status : Trust

Ward : WARD -1 & TPS,  
THODUPUZA

Statement of Income

	Sch.No	Rs.	Rs.	Rs.
Taxable Income u/s 11 to 13	1			0
■ <b>Total Income</b>				0
TDS	2		3,51,538	
Total prepaid taxes				3,51,538
■ <b>Refund Due</b>				3,51,540

Schedule 1

Taxable Income u/s 11 to 13

Return to be furnished u/s

139(4A)

Whether registered u/s 12A / 12AA?

Yes

Whether approved u/s 10(23C) (iv) to (via)?

No

Aggregate income referred to in sections 10, 11 & 12

6,06,63,523

Income available for application u/s 11

6,06,63,523

- 11(1): applied in India during the PY

- Revenue account

5,34,98,197

- Capital account

2,20,880

5,37,19,077

- 11(1): Accumulation to the extent of 15%

69,44,446

6,06,63,523

Income after application

0

Total deemed income

Taxable income

0

Schedule 2

TDS as per Form 16A

Deductor, TAN & Certificate No.

Kerala State Poverty Eradication Mission, TAN-  
TVDK01071A

TDS deducted	TDS claimed in current year	Gross Receipts as per 26AS
3,51,538	3,51,538	91,37,159

Bank A/c for Refund: STATE BANK OF INDIA 37253354403 IFSC: SBIN0016079

Date : 03-Oct-2018  
Place : PALAKKAD

For Highrange Rural Dev Socty

Authorised Signatory

**INDIAN INCOME TAX RETURN ACKNOWLEDGEMENT**

[Where the data of the Return of Income in Form ITR-1 (SAHAJ), ITR-2, ITR-3, ITR-4, ITR-5, ITR-6, ITR-7 transmitted electronically with digital signature]

Assessment Year  
**2017-18**

PERSONAL INFORMATION AND THE DATE OF ELECTRONIC TRANSMISSION	Name			PAN		
	HIGH RANGE RURAL DEVELOPMENT SOCIETY			AAAJH0168A		
	Flat/Door/Block No	Name Of Premises/Building/Village		Form No. which has been electronically transmitted	ITR-7	
	High Range Rural	Development Society				
	Road/Street/Post Office	Area/Locality				
		KATTAPANA		Status AOP/BOI		
	Town/City/District	State	Pin/ZipCode	Aadhaar Number/Enrollment ID		
	IDUKKI	KERALA	685508			
	Designation of AO(Ward/Circle) WARD 1 & TPS, THODUPUZA			Original or Revised ORIGINAL		
	E-filing Acknowledgement Number 891397561190717			Date(DD/MM/YYYY) 19-07-2017		
COMPUTATION OF INCOME AND TAX THEREON	1	Gross total income			1	0
	2	Deductions under Chapter-VI-A			2	0
	3	Total Income			3	0
	3a	Current Year loss, if any			3a	0
	4	Net tax payable			4	0
	5	Interest payable			5	0
	6	Total tax and interest payable			6	0
	7	Taxes Paid	a	Advance Tax	7a	0
			b	TDS	7b	0
			c	TCS	7c	0
			d	Self Assessment Tax	7d	0
			e	Total Taxes Paid (7a+7b+7c +7d)	7e	0
	8	Tax Payable (6-7e)			8	0
9	Refund (7e-6)			9	0	
10	Exempt Income	Agriculture		10	0	
		Others	0			

This return has been digitally signed by AJKRISHNAN in the capacity of MANAGING TRUSTEE  
having PAN ASNPA3175F from IP Address 116.68.105.207 on 19-07-2017 at IDUKKI  
Dsc SI No & issuer 2317103975393952573CN=SafeScript sub-CA for RCAL Class 2 2014,OU=Sub-CA,O=Sify Technologies Limited,C=IN

**DO NOT SEND THIS ACKNOWLEDGEMENT TO CPC, BENGALURU**

A.Y. 2017-2018

Name : HIGH RANGE RURAL DEVELOPMENT SOCIETY

P. Y. : 2016-2017

P.A.N. : AAAJH 0168 A

Address : High Range Rural  
Development Society  
KATTAPANA, IDUKKI - 685 508

D.O.F. : 13-Aug-1997

Status : Trust

Ward :

Statement of Income

Sch No Rs Rs Rs

■ Total Income

0

Bank A/c for Refund: STATE BANK OF INDIA 43929 IFSC: SBIN0005560

Date : 19-Jul-2017  
Place : IDUKKI

For HIGH RANGE RURAL DEVELOPMENT SOCIETY

Authorised Signatory





**ANIL & COMPANY**  
Chartered Accountants

Mob : 7094521312, 8089826595  
email:mailto:caanilkumar@gmail.com

Date: .....

## INDEPENDENT AUDITOR'S REPORT

To  
The Members of  
**THE HIGH RANGE RURAL DEVELOPMENT SOCIETY**  
KATTAPPANA, IDUKKI.

We have audited the accompanying financial statements of **The High Range Rural Development Society**, which comprise the Balance Sheet as at March 31, 2018 and the Income and Expenditure statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

### *Management's Responsibility for the Financial Statements*

Management is responsible for the preparation of these financial statements in accordance with The Income Tax Act, 1961. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

### *Auditor's Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Trust's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



1<sup>st</sup> Floor, Horizon Tower, Mettupalayam Street, Tharekkad Palakkad-678001





**ANIL & COMPANY**  
Chartered Accountants

Mob : 7094521312, 8089826595  
email: mailto:caanilkumar@gmail.com

Date: .....

**Opinion**

In our opinion and to the best of our information and according to the explanations given to us, the financial statements of The High Range Rural Development Society for the year ended March 31, 2018 give a true and fair view:-

- i) in the case of the Balance Sheet, of the state of affairs of the Trust as at 31st March, 2018;
- ii) in the case of the Income and Expenditure Account, of the surplus for the year ended on that date.

Palakkad  
28.09.2018



For ANIL & COMPANY  
Chartered Accountants  
(Firm Reg.No.017357s)

**CA Anilkumar. M, B.Com, ACA**  
Chartered Accountant  
Prop: Anil & Company  
M.No: 235835  
1st Floor, Horizon Tower, Mettupalayam Street,  
Tharekkad, Palakkad-678001



**ANIL & COMPANY**  
Chartered Accountants

Mob : 7094521312, 8089826595  
email: mailto:caanilkumar@gmail.com

**FORM NO. 10B**  
[See Rule 17B]

Date: .....

**Audit Report under section 12A (b) of the Income-tax Act, 1961 in the case of  
charitable or religious trusts or institutions**

We have examined the balance sheet of **Highrange Rural Dev Socty, AAAJH 0168 A** [name and PAN of the trust or institution] as at 31<sup>st</sup> March 2018 and the Profit and loss account for the year ended on that date which are in agreement with the books of account maintained by the said Trust or institution.

We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of the audit. In our opinion, proper books of account have been kept by the head office and the branches of the above-named Trust visited by us so far as appears from our examination of the books, and proper Returns adequate for the purposes of audit have been received from branches not visited by us subject to the comments given below: -

*The preparation of financial statements attached hereto are the responsibility of the assessee. My responsibility is to express an opinion on these financial statements based on my audit. I have conducted the audit in accordance with the auditing standards in India. These require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining on a test basis evidence supporting the amount and disclosures in the financial statements and audit also includes assessing the accounting principles used and significant estimate made by the assessee as well as evaluating the overall financial statement presentation. I believe that audit provides a reasonable basis for my opinion.*

In our opinion and to the best of our information, and according to information given to us the said accounts give a true and fair view: -

- (i) in the case of the balance sheet, of the state of affairs of the above named Trust as at 31<sup>st</sup> March 2018 and
- (ii) in the case of the profit and loss account, of the profit or loss of its accounting year ending on 31<sup>st</sup> March 2018.

The prescribed particulars are annexed hereto.

For ANIL & COMPANY  
CHARTERED ACCOUNTANTS

CA ANILKUMAR M B.Com, ACA

Proprietor, M. No. 235835

Firm reg No. 017357S

FIRST FLOOR, HORIZON TOWER, OPP

HDFC, METTUPALAYAM STREET,

THAREKKAD

Place: PALAKKAD  
Date: 28-Sep-2018



**ANNEXURE**  
**STATEMENT OF PARTICULARS**

**I. Application of income for charitable or religious purposes.**

1.	Amount of income of the previous year applied to charitable or religious purposes in India during that year.	5,37,19,077
2.	Whether the Trust has exercised the option under clause (2) of the Explanation to section 11 (1)? If so, the details of the amount of income deemed to have been applied to charitable or religious purposes in India during the previous year	No
3.	Amount of income accumulated or set apart for application to charitable or religious purposes, to the extent it does not exceed 15 per cent of the income derived from property held under trust wholly for such purposes.	Yes 69,44,446
4.	Amount of income eligible for exemption under section 11(1)(c) [Give details]	No
5.	Amount of income, in addition to the amount referred to in item 3 above, accumulated or set apart for specified purposes under section 11(2)	0
6.	Whether the amount of income mentioned in item 5 above has been invested or deposited in the manner laid down in section 11(2)(b)? If so, the details thereof.	NA
7.	Whether any part of the income in respect of which an option was exercised under clause (2) of the Explanation to section 11(1) in any earlier year is deemed to be income of the previous year under section 11(1B)? If so, the details thereof	No
8.	Whether, during the previous year, any part of income accumulated or set apart for specified purposes under section 11(2) in any earlier year: -	
	(a) has been applied for purposes other than charitable or religious purposes or has ceased to be accumulated or set apart for application thereto, or	No
	(b) has ceased to remain invested in any security referred to in section 11(2)(b)(i) or deposited in any account referred to in section 11(2)(b)(ii) or section 11(2) (b) (iii) or	No
	(c) has not been utilized for purposes for which it was accumulated or set apart during the period for which it was to be accumulated or set apart, or in the year immediately following the expiry thereof? If so, the details thereof.	No

## II. Application or use of income or property for the benefit of persons referred to in section 13 [3]

1.	Whether any part of the income or property of the Trust was lent, or continues to be lent in the previous year to any person referred to in section 13(3) [hereinafter referred to in this Annexure as such person]? If so, give details of the amount, rate of interest charged and the nature of security, if any	No
2.	Whether any land, building or other property of the Trust was made, or continued to be made, available for the use of any such person during the previous year? If so, give details of the property and the amount of rent or compensation charged, if any.	No
3.	Whether any payment was made to any such person during the previous year by way of salary, allowance or otherwise? If so, give details.	No
4.	Whether the services of the Trust were made available to any such person during the previous year? If so, give details thereof together with remuneration or compensation received, if any.	No
5.	Whether any share, security or other property was purchased by or on behalf of the Trust during the previous year from any such person? If so, give details thereof together with the consideration paid	No
6.	Whether any share, security or other property was sold by or on behalf of the Trust during the previous year to any such person? If so, give details thereof together with the consideration received.	No
7.	Whether any income or property of the Trust was diverted during the previous year in favour of any such person? If so, give details thereof together with the amount of income or value of property so diverted.	No
8.	Whether the income or property of the Trust was used or applied during the previous year for the benefit of any such person in any other manner? If so, give details.	No

## III. Investment held at any time during the previous year(s) in concerns in which persons referred to in section 13(3) have a substantial interest.

Sl. No	Name and address of the concern	Where the concern is a company, Number and class of shares held	Nominal value of the investment	Income from the investment	Whether the amount in Col. 4 exceeded 5 per cent of the capital of the concern during the previous year- say, Yes/No
1	2	3	4	5	6
Total					

Place: PALAKKAD  
Date: 28-Sep-2018



For ANIL & COMPANY  
CHARTERED ACCOUNTANTS

CA ANILKUMAR M B.Com, ACA  
Proprietor, M. No. 235835  
Firm reg No. 017357S  
FIRST FLOOR, HORIZON TOWER, OPP HDFC,  
METTUPALAYAM STREET, THAREKKAD



**THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)**  
(Regn No: 1-170/1997)  
**KATTAPPANA SOUTH POST, IDUKKI DISTRICT, KERALA - 685515**

Balance Sheet as on 31.03.2018

SOURCES OF FUND	Note No	Amount ₹
Capital Fund	A	70,11,776.52
Unsecured Loans		1,08,59,915.33
Current Liabilities & Provisions	B	2,76,699.00
<b>Total</b>		<b>1,81,48,390.85</b>
<b>APPLICATION OF FUND</b>		
Fixed Assets	C	7,38,791.42
Deposits, Loan & Advances	D	61,70,000.00
Current Assets	E	1,12,39,599.43
<b>Total</b>		<b>1,81,48,390.85</b>

Significant accounting policies and notes to accounts form an integral part of this financial statements.

For The High Range Rural Development Society

For The Highrange Rural Development Society

*[Signature]*  
Secretary / Authorized Signatory

Palakkad  
28.09.2018

Vide My Report of Even  
Date Attached.

*[Signature]*

Palakkad  
28.09.2018



**CA Anilkumar. M, B.Com, ACA**  
Chartered Accountant  
Prop: Anil & Company  
M.No: 235835  
1st Floor, Horizon Tower, Mettupalayam Street,  
Tharekkad, Palakkad-678001

**THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)**  
(Regn No: 1-170/1997)  
**KATTAPPANA SOUTH POST, IDUKKI DISTRICT, KERALA - 685515**

**Statement of Income and Expenditure for the year ended 31.03.2018**

Particulars	Note No	Amount (₹)
<b>INCOME</b>		
Donations and Contributions		5,14,76,235.45
Government Grant		91,37,159.00
Bank Interest Received		5,772.00
Adjustment for Prior Period Items		44,357.16
<b>Total</b>		<b>6,06,63,523.61</b>
<b>EXPENDITURE</b>		
Bank Charges		31,065.23
Depreciation		1,60,048.00
Administrative Expenses	F	39,01,174.04
Project Expenses	G	4,59,29,925.00
Scholarship Expenses		18,54,800.00
Staff Expenses	H	18,12,298.00
<b>Excess of Income over expenditure</b>		<b>69,74,213.34</b>
<b>Total</b>		<b>6,06,63,523.61</b>

Significant accounting policies and notes to accounts form an integral part of this financial statements.

For The High Range Rural Development Society

Palakkad  
28.09.2018

For The Highrange Rural Development Society  
  
Secretary / Authorized Signatory



Vide My Report of Even Date Attached.



Palakkad  
28.09.2018

**CA Anilkumar. M, B.Com, ACA**  
Chartered Accountant  
Prop: Anil & Company  
M.No: 235835  
1st Floor, Horizon Tower, Mettupalayam Street,  
Tharekkad, Palakkad-678001

<b>THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)</b> <b>(Regn No: 1-170/1997)</b> <b>KATTAPPANA SOUTH POST, IDUKKI DISTRICT, KERALA - 685515</b> <b>Receipts &amp; Payments Account for the year ended 31.03.2018</b>		
RECEIPTS		Amount ₹
<b>Opening Balance</b>		
Bank Accounts	10,29,857.45	
Cash-in-Hand	29,661.64	10,59,519.09
<b>Loans (Liability)</b>		
Unsecured Loans		1,95,24,890.00
<b>Income</b>		
Donations and Contributions		5,14,76,235.45
Government Grant		87,85,621.00
Bank Interest Received		5,772.00
Adjustment for Prior Period Items		44,357.16
<b>Total</b>		<b>8,08,96,394.70</b>
<b>PAYMENTS</b>		
<b>Loans (Liability)</b>		
Unsecured Loans		1,04,09,890.00
<b>Fixed Assets</b>		
Computer		1,06,650.00
Furniture and Fittings		1,08,730.00
Steel Almarah		5,500.00
<b>Deposits (Asset)</b>		25,50,000.00
<b>Loans &amp; Advances (Asset)</b>		35,75,000.00
<b>Expenditure</b>		
Bank Charges		31,065.23
Administrative Expenses		36,24,475.04
Project Expenses		4,59,29,925.00
Scholarship Expenses		18,54,800.00
Staff Expenses		18,12,298.00
<b>Closing Balance</b>		
Bank Accounts	1,07,02,852.43	
Cash-in-Hand	1,85,209.00	1,08,88,061.43
<b>Total</b>		<b>8,08,96,394.70</b>

For The High Range Rural Development Society

Palakkad  
28.09.2018

For The Highrange Rural Development Society

*[Signature]*  
Secretary / Authorized Signatory



*[Signature]*  
**CA Anilkumar. M, B.Com, ACA**  
Chartered Accountant  
Prop: Anil & Company  
M.No: 235835  
1st Floor, Horizon Tower, Mettupalayam Street,  
Tharekkad, Palakkad-678001

## **SIGNIFICANT ACCOUNTING POLICIES AND NOTES TO ACCOUNTS**

### **1. Significant Accounting Policies**

The significant Accounting Policies followed by the trust are as stated below:

#### **a) Basis of preparation**

The Financial Statements have been prepared on the historical cost convention on the accrual basis of accounting, in accordance with the generally accepted accounting principles and the applicable mandatory accounting standards issued by the Institute of Chartered Accountants of India.

#### **b) Use of estimates**

The preparation required adoption of estimates and assumptions that can affect the reported amounts of revenue and expenditure and the assets and liabilities as well as the disclosure of contingent liabilities. Differences between the actual results and estimates are recognised in the year in which they become known or materialises.

#### **c) Fixed Assets**

The Fixed Assets are stated at their original cost of acquisition including taxes, duties, freight and other incidental expenses relating to the acquisition and installation of the concerned assets. The sponsorship /grant received against specific assets have been adjusted against the cost incurred for generating the respective asset.

#### **d) Depreciation**

Depreciation has been provided on Fixed Assets under Written Down Value method at the rates and in the manner prescribed under the Income Tax Act, 1961.

#### **e) Revenue Recognition**

Income from training, grant/aid/scholarship and interest on deposits are recognised on accrual basis. Donations are recognised on receipt basis.

#### **f) Leases**

Leases where the lessor effectively retains substantially all the risks and benefits of ownership of the leased term, are classified as operating lease. Operating lease payments are recognised as an expense in the Income and Expenditure statement.





During the year, trust has entered into a lease land agreement for which lease payment outstanding are as follows:

Up to one year	-	₹23,93,988/-
1 year to five year	-	₹95,75,952/-
More than five years	-	₹670,31,664/-

**g) Prior period items**

Income/expenses omitted in prior period are considered in current year.

Previous year figures have been regrouped /reclassified wherever necessary to suit the current year's layout.



## 2. Notes to Accounts

Note No : A - Capital Fund	₹
Opening Capital	37,563.18
Add: Surplus during the year	69,74,213.34
<b>Total</b>	<b>70,11,776.52</b>

Note No : B - Current Liabilities & Provisions	₹
Accounting charges payable	30,000.00
Audit fee Payable	47,200.00
Lease rent payable	1,99,499.00
<b>Total</b>	<b>2,76,699.00</b>

Note No : D - Deposits, Loan & Advances	₹
Rent Deposit	1,50,000.00
Project Deposits	24,00,000.00
Building Advance	45,000.00
Vehicle Advance	50,000.00
Telephone Deposit	25,000.00
Other advances	35,00,000.00
<b>Total</b>	<b>61,70,000.00</b>

Note No : E - Current Assets	₹
Cash-in-Hand	1,85,209.00
Balance with Banks	
Axis Bank - 918010025472052	87,86,584.00
Bank of India - 853520110000038	4,87,249.85
State Bank of India - 10415743929	10,659.18
State Bank of India - 37253354403	14,09,707.45
Yes Bank - 069288700000013	2,429.88
Yes Bank - 069288700000013	6,222.07
TDS receivable	3,51,538.00
<b>Total</b>	<b>1,12,39,599.43</b>



Note No : C - Fixed Assets

(Figures in ₹)

Particulars	WDV as on 01.04.2017	Addition		Deletion	Net Asset	Rate	Depreciation	WDV as on 31.03.2018
		180 days or more	179 days or less					
<b>Plant &amp; Machineries</b>								
Vessels and Utensils	6,014.00	-	-	-	6,014.00	15%	902.00	5,112.00
Vehicle	6,12,997.00	-	-	-	6,12,997.00	15%	91,950.00	5,21,047.00
<b>Furniture and Fittings</b>								
Electrical Fittings	5,161.04	-	-	-	5,161.04	10%	516.00	4,645.04
Furniture and Fittings	28,808.78	1,08,730.00	5,500.00	-	1,43,038.78	10%	14,029.00	1,29,009.78
<b>Computers &amp; Peripherals</b>								
Computer , Printers & Softwares	24,978.60	1,06,650.00	-	-	1,31,628.60	40%	52,651.00	78,977.60
<b>Total</b>	<b>6,77,959.42</b>	<b>2,15,380.00</b>	<b>5,500.00</b>	<b>-</b>	<b>8,98,839.42</b>		<b>1,60,048.00</b>	<b>7,38,791.42</b>



Note No : F - Administrative Expenses	₹
Accounting charges	30,000.00
Audit fee	67,200.00
Electricity Charges	20,407.00
Legal and Consulting Charges	26,500.00
Meeting Expenses	2,76,637.00
Office Expenses	1,89,043.00
Lease rent for land	4,65,498.00
Postage & Courier Charges	1,801.00
Printing & Stationery Exp	1,45,308.00
Repairs & Maintenance	10,400.00
Rent - Offices	7,00,000.00
Rent - Staff Accomadation	80,500.00
Round off	0.34
Telephone Charges	33,962.00
Travelling Expenses	15,65,219.70
Vehicle Running & Maintenance	2,17,698.00
Web Designing Charges	71,000.00
<b>Total</b>	<b>39,01,174.04</b>

Note No : G - Project Expenses	₹
DDUKKY	1,73,000.00
EKALAVYA	1,15,000.00
SADHGRAHA - Tribal Housing Project	4,56,41,925.00
<b>Total</b>	<b>4,59,29,925.00</b>

Note No : H - Staff Expenses	₹
Salary and Wages	14,87,000.00
Staff Welfare Expenses	3,25,298.00
<b>Total</b>	<b>18,12,298.00</b>


For The High Range Rural Development Society

Palakkad  
28.09.2018

For The Highrange Rural Development Society  
  
Secretary / Authorized Signatory

Vide My Report of Even Date  
Attached.

Palakkad  
28.09.2018

  
**CA Anilkumar. M, B.Com, ACA**  
Chartered Accountant  
Prop: Anil & Company  
M.No: 235835  
1st Floor, Horizon Tower, Mettupalayam Street,  
Tharekkad, Palakkad-678001





AUDIT REPORT

I have audited the accounts of HIGH RANGE RURAL DEVELOPMENT SOCIETY (HRDS) regd. No.1.170/1997, KATTAPPANA SOUTH POST, IDUKKI DISTRICT, KERALA for the year ended 31<sup>st</sup> March 2017 and report that:

1. I have obtained all the information and explanations, which to the best of my knowledge and belief were necessary for the purpose of my audit.
2. In my opinion proper books of account have been kept by the Trust so far as it appears from my examination of the said book.
3. The balance sheet and income and expenditure account are agreement with the books of accounts.
4. In my opinion and to the best of my information and according to the explanations gice to me the accounts give a true and fair view.
  - a) In the case of Balance sheet of the state of affairs of the trust as at 31/03/2017
  - b) In the case of Income and expenditure account, excess of income over Expenditure for the year ended 31<sup>st</sup> March 2017.

Place: Palakkad  
Date: 30/06/17



*M. Gobinathan*  
**M. Gobinathan**  
Chartered Accountant  
Kakkathara, Karingarapully  
Palakkad  
M. No: 020940

THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)

REGD. NO.1.170/1997

KATTAPPANA SOUTH POST

IDUKKI DISTRICT, KERALA

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03-2017

EXPENDITURE		Rs.	INCOME		Rs.
To	Sadhgraha Tribal Housing Porject	3,23,65,754.15	By	Donations & contributions	3,47,36,075.00
"	Meeting expenses	7,17,077.04	"	Interest on Loan	8,91,465.30
	Salary expenses	4,30,000.00			
"	Rent Expenses	2,84,310.00			
	Stationery Expenses	99,352.34			
"	TA & DA	1,47,486.75			
"	Telephone Charges	1,46,700.00			
"	Electricity Charges	75,950.00			
"	MICS	35,976.86			
"	Interest paid on Microfinance	13,23,690.90			
"	Excess of Expenditure Over Income	1,242.26			

TOTAL

3,56,27,540.30

TOTAL

3,56,27,540.30



*M. Gobinathan*  
Chartered Accountant  
Kakkathara, Karingarapully  
Palakkad  
M. No: 020940



THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)

REGD. NO.1.170/1997

KATTAPPANA SOUTH POST

IDUKKI DISTRICT, KERALA

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03-2017

RECEIPTS		Rs.	PAYMENTS		Rs.
To	<u>Opening Balance</u>		By	Sadhgraha Tribal Housing Porject	3,23,65,754.15
"	Cash	11,161.65	"	Meeting expenses	7,17,077.04
"	<u>Cash at Bank</u>		"	Salary expenses	4,30,000.00
"	SBI KATTAPANA A/C No.43929	95,578.19	"	Rent Expenses	2,84,310.00
"	Kotak Mahindra	6,00,511.66	"	Stationery Expenses	99,352.34
"	Donations & contributions	3,47,36,075.00	"	TA & DA	1,47,486.75
"	Directors Advance	9,66,869.40	"	Telephone Charges	1,46,700.00
"	Micro Finance Loan	1,34,38,515.20	"	Electricity Charges	75,950.00
"	Interest on Loan	8,91,465.30	"	MICS	35,976.86
"			"	Directors Advances	7,00,216.00
			"	Microfinance loan repaid	1,33,54,143.27
			"	Interest paid on Microfinance	13,23,690.90
			"	<u>Closing Balance</u>	
			"	Cash in Hand	29,661.64
			"	<u>Cash at Bank</u>	
			"	SBI KATTAPANA A/C No.43929	10,00,624.00
			"	Yes Bank A/c No.661	4,905.45
			"	Yes Bank A/c No.13	24,328.00
TOTAL		<u>5,07,40,176.40</u>	TOTAL		<u>5,07,40,176.40</u>

*M. Gobinathan*  
Chartered Accountant  
Kakkathana, Karingarapully  
Palakkad  
M. No: 020940



THE HIGHRANGE RURAL DEVELOPMENT SOCIETY(HRDS)

REGD. NO.1.170/1997  
KATTAPPANA SOUTH POST  
IDUKKI DISTRICT, KERALA

BALANCE SHEET AS ON 31.03.2017

LIABILITIES		Rs.	ASSETS	Rs.
<u>CAPITAL FUNDS</u>			<u>FIXED ASSETS</u>	
Opening Balance	36,320.92		Furniture & Fittings	28,808.78
Surplus	<u>1,242.26</u>	37,563.18	Electrical Fittings	5,161.04
			Vessels and Utensils	6,014.00
			Vehcile	6,12,997.00
			Computer	<u>24,978.60</u>
				6,77,959.42
<u>CURRENT LIABILITIES</u>			<u>CURRENT ASSETS</u>	
Directors Advance	9,60,327.40		Building Advance	45,000.00
Micro Finance	<u>7,84,587.93</u>	17,44,915.33	Cash in Hand	29,661.64
			<u>Cash at Bank</u>	
			SBI A/c.No.43929	10,00,624.00
			YES BANK A/C No.13	24,328.00
			YES BANK A/C No.661	<u>4,905.45</u>
				11,04,519.09
TOTAL		<u>17,82,478.51</u>	TOTAL	<u>17,82,478.51</u>

*M. Gobinathan*  
Chartered Accountant  
Kakkathara, Karingarapully  
Palakkad  
M. No: 020940





# KARSHAKA PROJECT

“Project Proposal On Cultivation Of Medicinal Plants  
In Attappady For The Sustainable Livelihood  
Of Tribal People”



## MEMORANDUM OF ASSOCIATION, RULES AND REGULATIONS



**HRDS INDIA**  
(THE HIGH RANGE RURAL DEVELOPMENT SOCIETY)  
DOOR NO: XIV/273, NEAR POST OFFICE, CHANDRANAGAR,  
PALAKKAD-DISTRICT, KERALA, INDIA - 6780



**MEMORANDUM OF ASSOCIATION OF HRDS INDIA  
(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)**

- I NAME :** The name of the Society shall be, HRDS INDIA (The Highrange Rural Development Society).
- II REGISTERED OFFICE :** The principal office of the Society shall be situated in building No. 776 of the Ward No. XIII of Kattapana Grama Panchayat, Kattapana South.P.O. PIN code 685 515, Kattapana Village, Udumbanchola Taluk, Idukki District.
- III PRESENT ADDRESS :** The present address is HRDS INDIA (The Highrange Rural development Society), Door No: XIV/273, Near Post Office, Chandranagar, Palakkad-678 007, Kerala, India.

**IV. THE AREA OF OPERATION:** The area of operation of the Society shall be extended to the whole India.

**V. OBJECTS:** The objects for which the society established are :- To organize, establish, consolidate, carryout, maintain, and develop up-lifting activities aimed at the relief of the poor irrespective of race, community, caste, creed, territory of politics.

- To promote, establish and run projects and activities for the welfare and development of minority communities as well as Tribes and Scheduled Caste and to do the needful for the sustainable livelihood of the same.
- To implement and undertake activities, programmes and projects such as housing projects, income generating programmes, micro credit, micro finance, mutual funds and various kinds of thrift and saving schemes and all kinds of social activities for the up-liftmen of socially and economically down trodden groups in the society.
- To promote, undertake and conduct programmes and projects for tourism development.
- To establish, run and carry out various business, industries, commercial, mining and trade projects, ventures and programmes anywhere in India.
- To promote, start, undertake and run projects and programmes for the implementation and development of non-conventional energy.
- To promote, implement and undertake projects and programmes for the development of dairy and agricultural farming both natural and organic.
- To take up, promote and co-ordinate activities for communal harmony and secularism, national integrity and democracy among the people. And to take up, participate, provide and co-ordinate with all possible actions and activities for preventing terrorism.
- To promote science, literature, engineering and medicine and to undertake, conduct research, seminars, trainings and debates in the field of natural science, engineering, agriculture, waste management, environment, medical and social science.
- To establish, promote or assist in establishing or promoting and to subscribe to or become are a member of any other association whose object of similar or impart similar to the object of the society.
- To do all activities, trainings, works shops, seminars, etc., conducive to protect and improve the natural environment, compassion for living creatures, industry, agriculture and rural development.
- To implement and undertake projects and programmes for upbringing of children from wretchedness and activities for the welfare of poor children and destitute.
- To promote, implement, undertake and run projects, programmes, shelters and institutions for the welfare and development of deserted Women and Children so as to bring them in the main stream of life.
- To take part and participate in the welfare activities that are organized and sponsored by Government and Non-Government establishments, bodies and organizations within the capacity of the society.



- To organize, conduct and co-ordinate festivals, seminars, workshops, conventions on socio-medical, cultural, educational, environmental, sports and linguistic activities.
- To establish and run Old age homes, Home for destitute, Crushes, Palliative Centers etc.
- To conduct, organize, and co-ordinate awareness classes, seminars, trainings and workshops on various issues such as social welfare, law, self employment, Nature Club,

Environment, Human Rights, Women Empowerment, Prevention of HIV/AIDS, Poverty Alleviation etc.

- To provide financial, material, moral and intellectual support and assistance to the poor and drop out students for their study.
- To start, print and publish periodicals, Books, Leaflets, Brochures and such other kinds of publicity materials for the promotion of literature, science, education, tourism, culture, communal harmony, women empowerment and human rights.
- To start do establish and run any other activities on any subject that are deemed fit and proper for the betterment of the society, in the interest of justice and not against the spirit and rule of the society subject to the decision and approval of the Board of Directors of the society from time to time.
- To convene held and summon any meetings, seminars and conventions independently or jointly with like minded institutions having the same spirit, interest, goal and motives.
- To initiate, encourage, promote, organize, operate, advice, help societies, marketing organizations and to educate Small Industries, Legal Aid Societies, Non-formal educational centers, Hospitals, Community Programmes, Medical and Health Programmes, Community Service Centers and other institutions, bodies, persons as from time to time that may seem necessary.
- To produce, direct and to print, publish issue and exhibit any film, journals, periodicals, books, papers, pamphlets, advertisements, reports, lectures and reading matter for the diffusion of medical, agricultural, technical, moral, philosophical, cultural and other useful knowledge for the promotion, benefit and advancement of the charitable ideas, works and activities of the society.
- To establish and run holistic and cultural township comprises 1. HRDS INDIA Administrative Office, 2. Spiritual Centre, 3. Pathway- Naturopathy University, 4. Center For Medical & Research Institute, 5. Medical College For MBBS / Md, 6. Nursing College For Gnm /B.Sc /M.Sc, 7. Dental Medical College, 8. Ayurveda Medical College, 9. Sidha Medical College, 10. Engineering College, 11. International School, 12. Arts & Science College, 13. Fine Arts/Dance & Music Institute, 14. Old age Home, 15. Children's Home, 16. Town Ship/Shopping Complex/Flat/Villas, 17. Cultural Centre/ Kutthambalam/ Oottupura, 18. International Sports Complex / Golf Club, 19. Museum For Sculpture And, 20. International Library/Broadcasting & Media Center, 21. Theatre For Film And Drama, 22. Banks, 23. Staff Quarters /Hostels/ Guesthouse, 24. Canteens/Restaurant Veg / Non veg, 25. It Park/ Pharmaceuticals & Research Laboratory, 26. International Convention Centre, 27. Five Star & Economic Class Hotels, 28. Lake/Boating/ Real Forest Zoo, 29. Free Buses From Town To Town,

30. Fish Farm/ Organic agriculture Farm/Animal Farm, 31. Horse Farm/ Organic Milk, 32. Botanical Garden/ Rear Species Bank/ Museum, 33. Medicinal Plant Park/Amusement Park, 34. Total Landscaping with Sculpture, 35. Helipad/ Rubberized Road /Water Way, 36. Water Treatment Plant, 37. Pipeline Gas Connection, 38. Total Waste Management System, 39. 24 hours Laundry System, 40. 24 hours Intercom Connectivity, 41. 24 hours Security System, 42. 24 hours Under Ground Power & Water Supply, 43. 11kv Electric Substation, 44. Cemetery For Christian & Muslim, 45. Electric Crematorium.

**VI. MEANS :** For the above purpose:-

- a To acquire by purchase, Gift, Lease, Mortgage, Loan, Grant, Legacy, Bequeath, Exchange, Right of Privilege or otherwise of any person, Company, Society, Government, Institutional, Establishment or anybody whatsoever, movable or immovable properties of all descriptions for any purpose or purposes of the society. To establish, open and run any institution to deal with finance and other matters subject to abiding by the existing rules of the land and of the authorities concerned.
- b To accept, receive, hold, administer, and use any Gift, Bequest, Donation, Grant, Loan, Subscription, or Foundation in cash or kind or other form of property from nationally and internationally for all or any of the objects of the society.
- c To undertake, discharge, carry out the office, duties and functions of the trustees, managers, administrators solely and jointly with others in respect of any such Gift, Bequest, Donation, Trust, Foundation or properties, whether vested in the society for otherwise and to take such steps for securing such contributions to the funds of the society as may from time to time be deemed expedient.
- d To invest, lay aside, deposit in Bank or otherwise deal with the money or funds of the Society not immediately required for the objects of the society and to subscribe to, purchase, acquire, hold, sell, endorse and negotiate in every way debentures, stock, share and securities of every description on the money market.
- e To borrow, loan, funds and donations from individuals, societies, Banks, institutions and establishments with or without securities in any manner the Society may think fit and to repay the same.
- f To negotiate with and to enter into an agreement and arrangement with a Government or authorities, whether Centre, State, District, Municipal, Local, Universities, Board or other Public or Private bodies as may deem conducive to the promotion and accomplishments of the objects of the society or any of them and to apply for, obtain, collect, receive or recover from any such Government or authorities or bodies such Grant, Allowances, Concessions and Privileges as may be from time to time.

- g. To use the property and assets of the society and all income from the properties and assets movable and immovable or from the works of the society as such whensoever's derived from the objects of the society as set forth in this Memorandum of Association, provided that no portion thereof is distributed among its members by way of profit, dividend rendered to the society.
- h. To impart training to develop works and to carry out research and study on issues affecting the rural and urban poor and their development and to participate and encourage activities that aim in providing relief to victims of natural calamities.
- i. To do or cause to be done any all such acts or things shall be in keeping with the objects of the society, provided such things or acts are not being contrary or in consistence with the spirit and the principles of the laws under which this society has been organized and registered.
- j. To take any steps by personal or written appeal to public meetings or otherwise as may be from time to time be deemed expedient for the purpose of procuring.
- k. To collect contribution to the fund in which the society is interested in the shape of donation, annual subscription, affiliation fees, and service charges or otherwise.
- l. To apply the income and properties of the society for public or charitable purpose, in accordance with the provisions of the sections of 11,12, and 13 of the Income Tax Act 1961 for the time being in force.
- m. And more generally to do all acts and deeds which will further the assets and reputation of the society.

**VII GOVERNING BODY:-** The names and address and occupation of the present members of the Governing Body of the society are as under:-

Sl.	Name and Address	Occupation	Designation
1	<b>Dr.S.Krishnakumar IAS(Retd)</b> F-84, East of Kailash New Delhi-110065.	Former Union Minister (Govt. of India) Social Worker	<b>President</b>
2	<b>Kyedatore.M.M</b> #62, 1 <sup>st</sup> Floor, 3 <sup>rd</sup> Cross, Achari Colony, Opp.East of Venigan Bungalow, Gayathripruam, Mysore, Karnataka – 570019.	Engineer and Social worker	<b>Vice President</b>
3	<b>Usha Krishnakumar</b> F-84, East of Kailash New Delhi-110065.	Social Worker	<b>Vice President</b>
4	<b>Aji Krishnan</b> Sarayoo, Kattappana.P.O., Idukki Dist. – 685 515, Kerala.	Social Worker & Journalist	<b>Founder-Secretary</b>
5	<b>Dr. Babu Reghunath</b> Olickal House, Nariampara.P.O., Kattappana, Idukki Dist- 685 515, Kerala.	Doctor & Social Worker	<b>Joint Secretary</b>
6	<b>Vivekanandan .C .V</b> Chaneveettil, Santhi Nagar, Thottakkara, Ottappalam, Palakkad Dist., - 679 102, Kerala.	Electronics Eng & Social Worker	<b>Director</b>
7	<b>Anu Sivaram</b> Advaitham, 1 <sup>st</sup> Cross, Anugraha Layout, Mahadevapura Post, Bangalore – 560 048	Environmental Scientist & Social worker	<b>Director</b>



## **RULES AND REGULATIONS OF HRDS INDIA**

### **(THE HIGHRANGE RURAL DEVELOPMENT SOCIETY)**

- 1. INTERPRETATION:** (1) In these rules and regulations unless there is anything in the context repugnant or inconsistent therewith:- (a). The Society” shall mean HRDS INDIA (The Highrange Rural Development Society) (b). “Governing Body” shall mean the Governing Body of the Society constituted as provided by these rules and regulations. It is also known as the Board of Directors of the Society. (c). “The Act” shall mean the Societies Registration Act XII of 1955 of any modifications or re-enactment thereof for the time being in force. (d). “The President” shall mean the President of the Society (e). “The Secretary” shall mean the Secretary of the Society (f). “Director” shall mean the Director of the Society
- 2. MEMBERSHIP:** (2) The members of the Society shall be such persons who shall apply in writing to the governing body to be the member of the Society and who the governing body given its consent unanimously will be the member of the Society and who shall sign the register of members maintained by the Society in token of such consent. On termination and or cessation of membership of any person by the governing body, no such person shall have any right or claim to any right or privilege of membership of the Society and to the governing body or any property of the Society.



- 3 BOUNDED BY MEMMORANDUM AND RULES AND REGULATIONS:** Every member of the Society shall be bounded by the provisions of the Memorandum of Association of the Society and these rules and regulations and by all rules and regulation, bylaws and decisions from time to time be made or taken by the Society in general meeting or by the Governing Body.
- 4 PROPERTY AND INCOME:** The property and income of the Society shall be applied solely towards the promotion of the objects of the Society as set forth in the Memorandum of Association and no portion thereof shall be paid for or transferred directly or indirectly by way of bonus. Dividend and otherwise howsoever by way of profit to the members of the Society that nothing herein constrained shall prevent the payment in good faith or remuneration to employees of the Society of other persons for any service actually incurred for the purpose of the Society. The above clause does not bar payment of expenses, honorarium and such allowances to the Board members for their service.
- 5 TERMINATION OF MEMBERS :** Members of the Society shall ipso facto cease to be member if:
- A member dies or leaves or excluded from the array or
  - Tender his/her resignation in writing to the Society or
  - His/her membership terminated as provided by these rules and regulation.
- 6 OFFICE BEARERS :** (a) There shall be a President, Vice President, Secretary, Joint Secretary and Three Directors (Total Seven) in the Society (hereinafter called the office bearers)
- The Secretary of the Society is in charge of execution and implementation of social works and other works and activities directed and approved by the governing body from time to time.
  - Any of the office bearers may retire from the office at any time on notice of one month in writing to the Secretary.
  - The general body elects all office bearers for a term of 5 years or with his office cease unless otherwise specified. But when an emergency exists special general body can be summoned and election of office bearers can be conducted afresh if needed.
  - The term of office for the office bearers or any member of the governing body is terminated as and when the newly elected or appointed assumes charge of his office.





- 7. GOVERNING BODY :** The business of the Society shall managed by a Governing Body of 7 persons who are the office bearers.
  - a. An elected member may retire from office on giving a letter of resignation in writing to the Secretary of the Society.
  - b. If an elected member ceases to hold office by reason of death, retirement or otherwise, at any time before the ensuing election otherwise vacate election at which he/she would otherwise vacate his/her office the Secretary may appoint any member to hold office in his place until the date of such meeting.
- 8. GOVERNING BODY MEETING :** The governing body shall have full power to set notwithstanding any vacancy that may not have been filled up.
  - a. The governing body shall meet together at such place and time as it may from time to time determine by the Secretary.
  - b. A meeting of the Governing Body may at any time be called by the President or Secretary at the time deemed necessary or at the written request of 4 or more members of the governing body.
  - c. All meetings of the governing body shall be presided over by the President and in his absence by the Vice President and in their absence one shall elect from those present by a two third majority of votes. Three of these members of the governing body shall form a quorum at any meeting.
- 9. GOVERNING BODY SHALL HAVE THE FOLLOWING POWERS :** Subject to the restrictions contained in the Memorandum of Association the governing body shall have power to dispose of the funds of the Society for the purpose of the Society.
  - a. To manage and superintend the affairs of the Society to exercise all such powers of the Society, as are not under the statues or these regulations required to be exercised by the Society. In General Body Meeting, with power to make regulations and the by-laws for any matters which are authorized by the rules to be determined by regulations and by- laws as also for every case of exigency that arise not provided for by the existing regulations and by-laws, but subject to the ratification of the general body and approval of the governing body.
  - b. To appoint their own meetings and regulate their own proceedings and fix the date of all general body meetings of the Society.
  - c. To appoint professional, technical, practical or commercial, skilled, unskilled or other employees and committees or such purpose as shall in any case be deemed beneficial to the Society.
- 10. GENERAL BODY MEETING :** The Society shall in each year hold a general body meeting on or before 31st December as its annual general body meeting in addition to any of the meetings in the year, and shall specify the meeting as such in the notice calling in and not more than 15 months shall elapse between the date of one annual



general body meeting of the Society and that of the next. The annual general body meeting shall be held at such time and place as the governing committee shall decide. Two by third of total members shall constitute the quorum. The governing body members are elected by the general body meeting by simple majority of the general body.

a. The Secretary of the Society may, whenever they may think fit, and the Secretary of the governing body shall on the requisition made in writing by 2/3rd members of the Society stating the object of the meeting convene an extraordinary general body meeting.

b. The annual general body meeting called for the passing of a special resolution shall be called by 10 days notice in writing at the least, and a meeting of the Society other than an annual general body meeting for the passing of a special resolution shall be called by 24 hours notice in writing at the least.

c. The accidental omission to give notice of a meeting to or the non-receipt of the notice of a meeting by any person entitled to receive notice shall not invalidate the proceedings of that meeting.

d. No business shall be transacted at any general body meeting, except the selection of a chairman and the adjournment of the meeting unless a quorum of 2/3rd members was present in person at the time when the meeting proceeds to business.

e. The President or in his absence Vice President of the Society shall be entitled to preside as chairman at all general body meetings and in the absence of one of the above a chairman shall be elected from members of the governing body present at the meeting.

f. The Secretary shall exercise all such power privileges, and discretion and do all such acts, matters and things as may be necessary or convenient for the control of the general policies and overall directions of measures for the promotion or the accomplishment of the objects of the Society.

g. The President elected from the governing body for a term of 5 years or until his office ceases, unless otherwise specified. The Vice President, Secretary, Joint Secretary and Directors are also elected from the governing body. All the members of the governing body first elected by the general body meeting and afterwards elected as the office bearers from the elected members.

h. The Secretary shall solely open and operate the Bank account for and on behalf of the society.

i. No amendment to the Memorandum and Rules and Regulations of the Society will be made without the prior approval of the Commissioner of Income Tax.

j. In the event of dissolution the net assets, if any, after satisfying all the debt and liabilities shall either be transferred to societies/ trusts having the same or similar objects or shall be vested with the Government.



**12. SECRETARY :** The Secretary is elected from the governing body.

- a. The Secretary shall prepare and keep a record of the minutes of the proceedings of every meeting of the Society or of the governing body in a book or books to be kept for the purpose. Such minutes are signed by the President of that or of the next following meeting when so recorded and signed shall be receivable in evidence of the proceedings therein recorded without further proof. All the documents, deeds, covenants, bonds, records and such other documents concerned with landed and other properties of the Society shall be in the name of the Secretary and the Secretary shall execute all documents, deeds and covenants for and on behalf of the Society.

The Secretary shall exercise all such powers and do all such acts as may be required for the proper conduct of the ordinary business and administration of the projects, money and properties movable and immovable of the Society and shall keep the financial accounts of the Society. The Secretary shall be responsible for executing and implementing the projects, programmes and policies laid down and approved by the governing body. The Secretary is authorized to appoint staff and employees for the Society and its projects and the Secretary has the power to take action against their illegal and improper activities against the policies of the Society including termination.

- b. The Secretary shall convene the meeting of the Board of Directors with the consultation with the President at least once in three months.
- c. The Secretary is empowered to keep in his custody an amount not exceeded Rs.20,000/- and more, only on specific purpose as authorized by the Governing body.
- d. The Secretary is duly authorized and empowered to make negotiations and execute projects, programmes, enterprises and undertakings with other Societies, Trusts and Organizations, Companies, establishments and other institutions having the same and similar objects, objectives, projects and programmes and activities of HRDS INDIA and he can invest, donate and re-donate funds and facilitate necessary opportunities and infrastructure to accomplish the events, programmes and projects for and on behalf of the Society. The Secretary is also authorized to expand and make payments and disbursements such as service charges, commissions, consulting fees, etc. which are admissible under the law and permissible under prevailing Rules and Regulations of Government of India, that will be needed for the completion and fulfillment of such projects and programmes.
- e. All or any of the members of the Society shall be undergone penal and legal action, including removal from the office if he/she is detected, accused or punished for his/her illegal and unethical activities, deeds, action and conspiracy against the Society. The punishment shall be taken by majority decision of the meeting of the Governing Body held for that purpose. The Secretary shall undertake and execute the punishment and decisions taken by the Governing Body.

**13. DISSOLUTION :** The property and income of the Society shall be applied slowly towards the promotion of the objects of the Society as set forth in this Memorandum of Association and portion of these objects similar to the objects of the society and which prohibits the distribution of its or their income and property among its or their members. Such institutions or a society is to be determined by the members of the governing body at or before the time of dissolution specifically as per provisions of Societies Registration Act.

#### **14. MEMBERSHIP REGISTER**

Register will be maintained under Rule XII (Trav.) of 1955

<b>Sl.No</b>	<b>Name</b>	<b>Address</b>
1	<b>Dr.S.Krishnakumar IAS(Retd)</b>	F-84, East of Kailash, New Delhi-110065.
2	<b>Kyedatore.M.M</b>	#62, 1 <sup>st</sup> Floor, 3 <sup>rd</sup> Cross, Achari Colony, Opp.East of Venigan Bungalow, Gayathripruam, Mysore, Karnataka-570019.
3	<b>Usha Krishnakumar</b>	F-84, East of Kailash, New Delhi-110065.
4	<b>Aji Krishnan</b>	Sarayoo, Kattappana.P.O., Idukki Dist. - 685 515, Kerala.
5	<b>Dr. Babu Reghunath</b>	Olickal House, Kattappana.South P.O. Idukki Dist - 685 515,Kerala.
6	<b>Vivekanandan.C.V</b>	Chaneveettil, Santhi Nagar, Thottakkara, Ottappalam, Palakkad Dist – 679 102, Kerala.
7	<b>Anu Sivaram</b>	Advaitam,1stCross,AnugrahaLayout,Mahadevapura, Bangalore - 560 048.

