

Project No: B-09 (Executive Summary)

Herbal Gardening/cultivation of medicinal plant of Men-Tsee-Khang (Tibetan Medical & Astro.Institute of His Holiness the Dalai Lama) at Jispa, Himachal Pradesh, H.P, India.

The vision of Men-Tsee-Khang is to improve the lives of people through our traditional system of medicine, and to preserve this element of our rich and ancient culture. Since being re-established in 1961, following the occupation of Tibet and subsequent exile of His Holiness the 14th Dalai Lama and the Tibetan Government, Men-Tsee-Khang has preserved and promoted this ancient form of medicine that is inherently intertwined in Tibetan culture. Since its re-establishment, Men-Tsee-Khang has produced 263 physicians and 47 astrologers from its headquarters in Dharamsala, delivered healthcare services throughout India and has become an integral economic contributor to the Tibetan community in exile through its employment of nearly five hundred people nationally and through its social welfare programs. Our 55 dedicated branch clinics deliver low-cost traditional healthcare to over 500,000 people in local communities throughout India every year. In our commitment to the vulnerable and disadvantaged, we provide free health consultations and medicine to those most in need. Our headquarters house various academic departments developed to preserve and promote Tibetan Medicine and Astrology.

About the Project: Tibetans have enjoyed thousands of years of experience with their rich herbs and minerals. The ancient medicine man and the later physicians discovered a great number of herbs and minerals and the way to use them for healing. Tibetan plants possess strong tastes and high potencies that are naturally powerful against diseases. The Tibetan Materia Medica, through its own tradition and method, has developed particular pharmacy works, like specially the multi compounding characteristic and tradition, which is a special feature that greatly differentiates it from the other Asian medical systems. It is felt the importance of cultivating medicinal plants, specially the (rare, endangered and threatened) (RET) species of Tibetan medicinal plants but also other various medicinal plants which is being used in volumes for manufacturing of medicines and health care products. *Men-Tsee-Khang* started cultivation initiatives since 2001 at Sonada, Darjeeling and Leh on a rented plot. Mr.Ravi Thakur,MP and a long time friend of Men-Tsee-Khang at Jispa has donated a land measuring about 5-10 Acres for cultivation of medicinal plants and we are looking forward to cultivate the following medicinal plants 1.) *Inula racemosa*, 2.) *saussurea lappa*, 3.) *kaempferia galangal* and 4.) *Aconitum heterophyllum*.

- **Goal of the project:** To increase the production capacity of Traditional Tibetan herbal supplies through mass cultivation of medicinal plants and trees, creating a sustainable social enterprise model.
- **Objectives of the project:** To preserve and protect the endangered medicinal plants and trees up to its potency and to gain maximum required ingredients for medicine.
- Increasing the availability of the medicinal plants utilized in traditional Tibetan Medicine and other sectors through traditional defined cultivation methods.
- To provide technical assistance in establishing herbal gardens.
- Creating awareness on the importance of medicinal plants within the society
- **Main Activities:** Construction of poly houses, Procurement of necessary tools, equipments, seeds, irrigation facilities, and training for the cultivators.
- **Final Beneficiaries:** Patients and people receiving traditional Tibetan medicine as a source of treatment.
- The local Jispa community through its employment in herbal garden.
- **Duration of the project:** 5 years or 60 calendar months.
- **Location of the project:** Jispa, Himachal Pradesh (H.P), India
- **Budget for the Project:** INR: 43, 20,255.00/ USD: 69,681.00 / EUR: 52,051.00 Exchange rate as on 8th November, 2013.

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Project No: B-09 (Expanded)

SUMMARY OF ACTION

Title of the action:	Herbal Gardening/cultivation of medicinal plants of Men-Tsee-Khang (Tibetan Medical & Astro.institute of His Holiness the Dalai Lama) at Jispa, Himachal Pradesh, H.P, India.
Location of the action	Jispa, Himachal Pradesh, (H.P), India.
Total duration of the action:	5 years or 60 months
Budget	<ul style="list-style-type: none"> • INR: 43,20,255.00 • USD: 69,681.00 • EURO: 52,051.00 Exchange rates as on 8th November, 2013.
Objectives of the action	<ul style="list-style-type: none"> • OVERALL OBJECTIVE: TO SPECIFIC OBJECTIVES: • To increase production capacity of Traditional Tibetan medicine through mass cultivation of medicinal plants and trees, creating a sustainable social enterprise model. • To preserve and protect the endangered medicinal plants and trees up to its potency and to gain maximum required ingredients for medicine. • Increasing the availability of the medicinal plants utilized in Traditional Tibetan Medicine and other sectors through traditional defined cultivation methods. • To contribute to the economic growth of the Tibetan and local community through increased employment and social welfare programs. • To continue to meet the needs of patients receiving treatment throughout India by meeting the growing demands of our national branch clinics. • To sustain Men-Tsee-Khang activities that seek to preserve this valuable component of our culture including the training of new practitioners and its various academic departments. • To provide technical assistance in establishing herbal gardens. • Conservation of rare medicinal plants which are under the threat of extinction and increasing the availability of the medicinal plants utilized in traditional Tibetan medicine and other sectors through traditional defined cultivation methods. • Creating awareness on the importance of medicinal plants within the society.
Target group(s)	<ul style="list-style-type: none"> • Traditional Tibetan Doctors and Sowa-Rigpa Practitioners across Himalaya and world at large.
Final beneficiaries	<ul style="list-style-type: none"> • Tibetan Community in exile through its cultural preservation, economic contribution, healthcare service, social welfare programs • The global community, by providing access to traditional Tibetan medicine
Estimated results	<ul style="list-style-type: none"> • Immediate increase in the unit of land under herbal plants or trees cultivation by 5-10 Acres in Jispa, Himachal Pradesh (H.P), India.
Main activities	<ul style="list-style-type: none"> • Construction of poly houses for cultivation of medicinal plants & trees. • Procurement seed, irrigation sources, new equipments and Machineries. • Herbal gardening training for 2-3 persons once in a year for a period ranging from 1-3 month.

DESCRIPTION OF THE ACTION

BACKGROUND TO THE PREPARATION OF THE ACTION:

The vision of Men-Tsee-Khang is to improve the lives of people through our traditional system of medicine, and to preserve this element of our rich and ancient culture. Since being re-established in 1961, following the occupation of Tibet and subsequent exile of His Holiness the 14th Dalai Lama and the Tibetan Government, Men-Tsee-Khang has preserved and promoted this ancient form of medicine that is inherently intertwined in Tibetan culture. Since its re-establishment, Men-Tsee-Khang has produced 243 physicians and 47 astrologers from its headquarters in Dharamsala, delivered health services throughout India and has become an integral economic contributor to the Tibetan community in exile through its employment of nearly five hundred people nationally, social welfare programs, and through the financial assistance provided to many other Tibetan Organisations.

Our 54 dedicated branch clinics deliver low-cost traditional healthcare to over 500,000 people in local communities throughout India every year. In our commitment to the vulnerable and disadvantaged, we provide free health consultations and medicine to those most in need. In addition to the valuable health services provided, our headquarters house various academic departments developed to preserve and promote Tibetan Medicine, manufacture a range of medicinal and astrological products, conduct Clinical Research on disorders like diabetes, cancer, hepatitis and hypertension and are developing a Materia Medica by identifying and documenting traditionally used herbs, preserving pressed specimens and through the cultivation of rare species for research, amongst many other projects.

*Master Gampopa in quoting the words of Marster Nagarjunacarya said:
The life saving nectar grows in the mountains,
But only, if you correctly identify the herbs and plants
with the proper knowledge in accordance to the Master.*

As one of the oldest medical traditions in the world, Tibetan medicine is gradually being brought into the limelight as Tibetan culture draws much public attention both at home and abroad. Tibetans have enjoyed thousands of years of experience with their rich herbs and minerals. The ancient medicine man and the later physicians discovered a great number of herbs and minerals and the way to use them for healing. Tibetan plants possess strong tastes and high potencies that are naturally powerful against diseases. Spiritual healing and love and compassion of the Buddhist and medical ritual practices, are also believed to cure the body, mind and speech disequilibrium at more subtle levels. The Tibetan Materia Medica, through its own tradition and method, has developed particular pharmacy works, like specially the multi compounding characteristic and tradition, which is a special feature that greatly differentiates it from the other Asian medical systems.

It is felt the importance of cultivating medicinal plants, specially the (rare, endangered and threatened) (RET) species of Tibetan medicinal plants but also other various medicinal plants which is being used in volumes for manufacturing of medicines and health care products. Raw materials traded in markets are not of best quality; therefore such exercises should be implemented in order to improve quality by strictly following good agricultural and harvesting practices (GA & HP). *Men-Tsee-Khang* started cultivation initiatives since 2001 at Sonada, Darjeeling and Leh. The small 300sq.m nursery is used to raise the seedlings and study of medicinal plants for medical students. Those lands which are under cultivation don't wholly meet the total need of raw materials for *Men-Tsee-Khang* for manufacturing medicines and neutraceutical products. Therefore, *Men-Tsee-Khang* always look forward for extension and upgrading of its cultivation on medicinal plants and work together with trustful farmers who could produce more for *Men-Tsee-Khang*. In long run it helps in the supplement of qualitative medicinal plants and drastically brings on the extraction from wild and as well as preservation of genetic resources of medicinal plants. In future such cultivation of medicinal plants provides useful inputs for quality assurance practices and use of genuine medicinal plants are guaranteed

The need of the hour has come that the mass cultivation of medicinal herbs and trees should be carried on. Most of the expenses will occur on the transportation, seedling, rental and remuneration for human inputs. It is always best to cultivate the medicinal plants & trees in its natural habitats, so that the maximum potency of the medicinal plants can be achieved. Mr. Ravi Thakur, MP and a long time friend of *Men-Tsee-Khang* has

graciously accepted to provide few acres of land (5-10 acres) at Jispa, Himachal Pradesh (H.P) for our medicinal plant cultivation project.

Medicinal plant cultivation at Jispa, Himachal Pradesh (H.P), India:

Entire 5-10 acres of land will be put under use for cultivation of *Inula racemosa*, *saussurea lappa*, *kaempferia galangal* and *aconitum heterophyllum*.

VISIT TO OTHER RESEARCH INSTITUTES:

S. No.	Name of place	State
1	Dehradun	Uttarakhand
2	Palampur	Himachal Pradesh

VISIT OF EXPERTS TO SITE

S. No.	Number of experts	Name of place	State
1	Two experts twice a year	Dehradun	Uttarakhand
		Palampur	Himachal Pradesh

RET AND HIGH ALTITUDE MEDICINAL TREES, PLANTS, PLANTATIONS AND RESEARCH DONE EARLIER:

Some of the RET medicinal tree and plants used in Tibetan medicine are: 1) *Picrorrhiza scrophulariiflora* Pennell, 2) *Aristolochia moupinensis*, 3) *Meconopsis* sp, 4) *Meconopsis aculeata* Royle, 5) *Herpetospermum pedunculatum* [SER.] BAILL, 6) *Thlaspi arvense* L., 7) *Carthamus tinctorius* L, 8) *Stephania epigaea*, 9) *Agallocha* sp, 10) *Inula racemosa* and *Saussurea lapa*. Men-Tsee-Khang has done several researches and on the basis of research done earlier, some of the medicinal trees and plants which are successfully being grown in the high altitudes are: *Inula racemosa*, *Saussurea lapa*, *Meconopsis grandis*, *Herpetospermum pedunculatum*, *Justicia adhatoda*, *Arctium lapa*, *Mahonia napaulensis* and *Stephania epigaea*.

PROBABLE REQUIREMENT OF RARE MEDICINAL TREES, FOR TIBETAN MEDICINE AROUND 2030, 2030 ETC:

1) *Stephania* sp, 2) *Santalum album* Linn, 3) *Pterocarpus santalinus* Linn.F 4) *Aristolochia moupinensis* FRANCH, 5) *Glycyrrhiza glabra* and 6) *Agallocha* sp.

Although all the medicinal plants used in the traditional Tibetan medicine should be collected in accordance with the seven essential limbs or principles mentioned in its classical text, nevertheless it is hard to comply by the whole seven limbs or principles. The seven important limbs or principles are, 1) The growth of Medicinal plant in its natural habitat, 2.) The collection of Medicinal plant in its own time, 3) Removal of poisons (Coarse Potency), 4) the process of drying the Medicinal Plants, 5) Timely utilization of medicinal plants before their potency fades away, 6) Smoothing the medicinal compounds and 7) the three methods of compounding suitable machines.

As far as the seven important limbs or principles are concerned, the first one which points out the importance of herbs growing in its own natural habitat. TMAI can train people living in the areas of Jispa about the cultivation, collection, storage of herbs etc.

AIMS AND OBJECTIVES OF THE ACTION

- To increase production capacity of Traditional Tibetan medicine through mass cultivation of medicinal plants and trees, creating a sustainable social enterprise model.
- To preserve and protect the endangered medicinal plants and trees up to its potency and to gain maximum required ingredients for medicine.

- Increasing the availability of the medicinal plants utilized in Traditional Tibetan Medicine and other sectors through traditional defined cultivation methods.
- To contribute to the economic growth of the Tibetan and local community through increased employment and social welfare programs.
- To continue to meet the needs of patients receiving treatment throughout India by meeting the growing demands of our national branch clinics.
- To create awareness, promote and preserve Traditional Tibetan Medicine
- To sustain Men-Tsee-Khang activities that seek to preserve this valuable component of our culture including the training of new practitioners and its various academic departments
- To provide technical assistance in establishing herbal gardens.
- Conservation of rare medicinal plants which are under the threat of extinction and increasing the availability of the medicinal plants utilized in Traditional Tibetan medicine and other sectors through Traditional defined cultivation methods.
- Creating awareness on the importance of medicinal plants within the society.

PROJECT ACTIVITIES AND OUTPUT

The project will be undertaken in Jispa regions of Himachal Pradesh (H.P), India. This project also includes the procurement of herbal supplies, arrangement of transportation and manpower.

The expected outcome of the action will be an immediate increase in the land under herbal cultivation of the above mentioned medicinal plants at Jispa, Himachal Pradesh (HP) India by 5-10 acres, which caters the need of the future herbal supplies of Men-Tsee-Khang.

TIME FRAME

The primary time consideration will be the procurement of necessary equipments, construction of poly houses, arrangement of necessary mode of transportation and funds for the Mass Cultivation of Medicinal plants, trees and herbs in the above mentioned locations.

BUDGET FOR THE PROJECT:

S.No	Description	Qty	Unit	No	Rate	Amount for 1 year	Amount for 5 Yrs
1	Equipment and other accessories	-	-			6,5000.00	6,5000.00
2	Cost of maintenance-construction of finance	-	L/S	-	-	105,000.00	105,000.00
3	Cost of seedling, seeds etc.	-	L/S	-	-	35,000.00	175,000.00
4	Cost of construction of poly house.	-		-		355,000.00	355,000.00
5	Water sources and appliances	-		-		38,000.00	190,000.00
6	Training	-	L/S	-		25,000.00	125,000.00
7	Salary for 1 person for a year	1	Month	12	12,500.00	150,000.00	750,000.00
8	Transportation	-	L/S	-		58,000.00	290,000.00
9	Communication-Telephone, Fax etc.	-	L/S	-	300.00	3,600.00	18,000.00
10	Wages for 10 labor for 4 Months	1	Month	10	10,500.00	420,000.00	2,100,000.00
	Total Amount	-					4,114,500.00
	Contingencies@5%	-					205,725.00
	Total Amount in INR						43,20,255.00
	Total Amount in USD						69,681.00
	Total Amount in EURO						52,051.00

Exchange rate as on 8th November, 2013.

TARGET GROUPS AND BENEFICIARIES

Approximately 80% of people living in developing countries depend on traditional medicine for primary health care. The World Health Organization recognizes the contribution and importance of traditional medicine and the need to preserve it as expressed by the Director General Dr Chen, who states “These are historical assets that have become all the more relevant given the three main ills of life in the 21st century: the globalization of unhealthy lifestyles, rapid unplanned urbanization, and demographic ageing. The time has never been better, and the reasons never greater, for giving traditional medicine its proper place in addressing the many ills that face all our modern – and our traditional – societies.” The cultivation or plantation of the above mentioned medicinal plants at Jispa, Himachal Pradesh (HP), India would enable us to see the land under cultivation by 5-10 Acres.

THE HERB GROWERS

The consistent increase in the number of patients who were seeking treatment from our 54 national branch clinics in India and the demands for health care products from private sectors is on rise. The more needs of herbs to fulfill the demands of our national clinics, private sectors and individuals will ultimately results in benefitting the herb growers in the long run.

THE PRIVATE SECTOR

The local Private Sector has consistently expressed interest in procuring products through Men-Tsee-Khang. This group includes Private Tibetan Medical Practitioners both nationally (of which nearly 80 have registered their interest in Men-Tsee-Khang supply) and throughout 55 countries internationally.

EMPLOYEES

Men-Tsee-Khang currently employs over 500 people throughout India. The herbal gardening or cultivation of medicinal herbs would enable Men-Tsee-Khang to employ an additional of almost 10 additional local employees immediately and continue to grow and develop employment throughout the organization. Awareness programs such as importance and benefit of cultivating medicinal herbs and trees will be provided for the people.

SOCIAL WELFARE BENEFICIARIES

Men-Tsee-Khang Social Welfare programs include providing free healthcare to Tibetan refugees, the terminally and critically ill, the elderly and those suffering serious financial hardship.

INTERNATIONAL COMMUNITY

Men-Tsee-Khang is supporting the health and wellbeing of the international community by providing access to one of the oldest medical systems. Like many traditional forms of medicine, Tibetan Medicine is safe, has limited side effects and is a low cost, sustainable form of medicine.

Time line for Project

S.No	Particular	Y-1	Y-2	Y-3	Y-4	Y-5
1	<p>Preparation of Soils: To prepare the varieties of soils such as sand, loam and clay soils. Also to prepare the manure or composed the soils for the plants.</p> <p>Sowing Methods or seedling: The seeds are best sown as soon as they are rope, in a cold frame or warm strategy.</p> <p>Vegetative Propagation: a)Through cuttings, b) Through grafting and c) Through stumps</p> <p>Greenhouse: The seeds sown in the nursery beds and polythene bags should be treated in a greenhouse for better growth and healthy plants.</p> <p>Shadehosue: While in the nursery the plant should be treated in the shade house to protect it from the strong intensity of the sunlight in summer.</p> <p>Transplanting and Aftercare: Trans planting in case of nursery raised seedling or sapling is done according to seasons or favorable seasons or times, when the plants reach about it stage of transplant time. Regular weeding and watering is needed to the plant after transplanted into fields.</p>					
2	<p>Preparation of Soils: To prepare the varieties of soils such as sand, loam and clay soils. Also to prepare the manure or composed the soils for the plants.</p> <p>Sowing Methods or seedling: The seeds are best sown as soon as they are rope, in a cold frame or warm strategy.</p> <p>Vegetative Propagation: a)Through cuttings b) Through grafting and c) Through stumps</p> <p>Greenhouse: The seeds sown in the nursery beds and polythene bags should be treated in a greenhouse for better growth and healthy plants.</p> <p>Shadehosue: While in the nursery the plant should be treated in the shadehouse to protect it from the strong intensity of the sunlight in summer.</p> <p>Transplanting and Aftercare: Trans planting in case of nursery raised seedling or sapling is done according to seasons or favorable seasons or times, when the plants reach about it stage of transplant time. Regular weeding and watering is needed to the plant after transplanted into fields.</p>					
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4	<p>Preparation of Soils: To prepare the varieties of soils such as sand, loam and clay soils. Also to prepare the manure or composed the soils for the plants.</p> <p>Sowing Methods or seedling: The seeds are best sown as soon as they are ripe, in a cold frame or warm strategy.</p> <p>Vegetative Propagation: a) Through cuttings b) Through grafting and c) Through stumps</p> <p>Greenhouse: The seeds sown in the nursery beds and polythene bags should be treated in a greenhouse for better growth and healthy plants.</p> <p>Shadehouse: While in the nursery the plant should be treated in the shadehouse to protect it from the strong intensity of the sunlight in summer.</p> <p>Transplanting and Aftercare: Trans planting in case of nursery raised seedling or sapling is done according to seasons or favorable seasons or times, when the plants reach about it stage of transplant time. Regular weeding and watering is needed to the plant after transplanted into fields.</p>					
5	<p>Preparation of Soils: To prepare the varieties of soils such as sand, loam and clay soils. Also to prepare the manure or composed the soils for the plants.</p> <p>Sowing Methods or seedling: The seeds are best sown as soon as they are ripe, in a cold frame or warm strategy.</p> <p>Vegetative Propagation: a) Through cuttings b) Through grafting and c) Through stumps</p> <p>Greenhouse: The seeds sown in the nursery beds and polythene bags should be treated in a greenhouse for better growth and healthy plants.</p> <p>Shadehouse: While in the nursery the plant should be treated in the shadehouse to protect it from the strong intensity of the sunlight in summer.</p> <p>Transplanting and Aftercare: Trans planting in case of nursery raised seedling or sapling is done according to seasons or favorable seasons or times, when the plants reach about it stage of transplant time. Regular weeding and watering is needed to the plant after transplanted into fields.</p>					

Note: M stand for Months.

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