

Name of the Partnership/Initiative

Desert Rainwater Harvesting Initiative
(An International partnership designed to provide fresh water to rural communities in drought affected regions in Rajasthan India)

Expected date of initiation: Jan 2003

Expected date of completion: Dec 2004

Partners Involved:***Potential Government and Intergovernmental organizations:***

India's Ministry of Water Resources
India's Ministry of Rural Affairs
Australian Federal Gov – AusAID
Rajasthan State Government, Women's Education and Child Development Dept
India

Major groups:

The International Sri Deep Madhavananda Ashram Fellowship
The Australian Association of Yoga in Daily Life
OzGREEN - Global Rivers Environmental Education Network, Australia
Om Vishwa Deep Gurukul, Jadan Pali District
Sri Devapuriji Ashram, New Dehli, India
Sri Deep Ashram, Jaipur, India
Yoga in Daily Life – centers in: [America](#), Austria, Croatia, Czech Republic, Germany, Hungary, Slovakia, Slovenia, Yugoslavia, NZ

Potential Partners

Our International Education and Research centre on sustainability will serve as an Asia/Pacific hub for rainwater harvesting information and technologies exchange. We are inviting all parties interested in establishing a network to deliver projects on rainwater harvesting for desert and semi arid regions in the South. We are interested in working collaboratively with partner organizations in designing and implementing the desert rainwater initiative that will be used as a model for other parts of the world.

We have contacted the following organizations so far with this aim in mind

Centre for Science and Environment (CSE)

CECOEDECON

Fresh Water Action Network (FAN)

Global Rainwater Harvesting Collective

At the WSSD we are looking to extend this network and build further international partnerships

Leading Partners::

International Sri Deep Madhavananda Ashram Fellowship and The Australian Association of Yoga in Daily Life

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Main objectives of the Partnership/Initiative

Please provide a brief description:

Project description:

Rajasthan is a desert state in India with a geographical area equal to 10 percent of the country, but with only one percent of the country's water resources. The scarce and fragile water resources in this semi-arid environment are under threat from frequent droughts and increasing groundwater salinity. The state's poor rural communities, which account for 77 percent of the population, need access to fresh water for drinking and agriculture which accounts for 33 per cent of the gross domestic product (GDP).

The Rainwater Harvesting activities [started as a small scale project](#) to construct a basic rainwater reservoir and provide water delivery via tanker to a few drought affected communities near one of the lead partners "Education and Research Centre's" in the Jadan region of Rajasthan. With the drought extending into its fourth year, it was soon [realised](#) through discussion with villagers and from increasing requests for water solutions in communities throughout the wider Rajasthan region that [this was an issue on a much larger scale](#) in urgent need of attention.

[As global whether patterns change and the frequency and severity of both drought and flooding to remote rural communities in developing countries](#) is heightened, the Desert Rainwater Harvesting Initiative is now seizing the opportunity provided by the WSSD to initiate a large scale rainwater harvesting initiative. At the completion of the WSSD the Desert Rainwater Harvesting Initiative aims to provide a sustainable source of fresh water for rural communities through a number of innovative strategies designed to promote traditional rainwater harvesting technologies. Through the creation of culturally appropriate rainwater harvesting technologies for rural village communities throughout Rajasthan, the Desert Rainwater Harvesting Initiative will provide a global model for other semi-arid and drought affected regions of the world.

An International Centre for Sustainable Education and Research in Australia will provide teams of multi disciplinary specialists to provide funding, technical advice, capacity building, community education and project implementation activities as required.

The Desert Rainwater Harvesting Initiative also aims to encourage and disseminate a range of sustainable approaches to water management and conservation through the development of Village Water Action Plans which engages the local communities in all aspects of catchment management planning including the rehabilitation of recharge areas through reforestation and strategically placed interceptor dams to recharge groundwater.

The Desert Rainwater Harvesting Initiative will work in close collaboration with local villages, women's groups, NGOs and government agencies to develop appropriate sustainable

technologies to capture the excess rainwater from monsoon rains and make them available to the surrounding community throughout the rest of the year including prolonged periods of drought. An integrated Village Water Action Plan will be developed to determine how water is captured, allocated and delivered between users, and managed for long term sustainability.

Stage one of the initiative will involve the construction of a 150 million litre rainwater reservoir to maintain a supply of freshwater for the drought affected Jadan region. Using a combination of traditional and modern technologies appropriate for the desert region, the reservoir will be designed to minimize evaporation and seepage ensuring a year round water supply for surrounding villages. This will be combined with the implementation of village water action plans throughout the local region. The project will benefit the local communities by providing local employment, fresh water for drinking and agriculture, reducing pollution, preventing water related diseases and improving public health.

Using this model six other community based rainwater harvesting reservoirs will be constructed targeting remote regions of Rajasthan, and integrated in with appropriate Village Water Action Plans. In addition to constructing the reservoirs, a combination of other rainwater harvesting techniques will be encouraged including the rainwater jars, small wells, and interceptor dams to recharge groundwater. The Village Water Action Plans will identify recharge areas, encourage the strategic planting of trees and fodder, develop soil erosion controls, and provide for the ongoing maintenance of the systems.

Objectives:

To develop a range of innovative, culturally appropriate technologies for rainwater harvesting to be used to support sustainability in rural villages throughout Rajasthan with regard to:

- Providing a sustainable source of clean drinking water
- Water for agriculture to guarantee reliable locally produced food
- Improved community health, (by reducing the level of waterborne diseases)
- Industry (stimulate sustainable economic growth through a revival of the water dependant agricultural industries)
- Improved local environment – (Reforestation, soil conservation, ground water recharge, protection of biodiversity)
- Sustainable water management

To establish grassroots integrated Water Action Plans in which villages take responsibility for conserving their scarce water resources, and implement a range of sustainable catchment management initiatives and ongoing maintenance of the rainwater harvesting devices.

International Objectives

The combination of providing a range of culturally appropriate rainwater harvesting technologies together with a Village Water Action Plan can be used as a model for drought affected communities throughout India and in other parts of the globe. The Desert Rainwater Harvesting Initiative will form part of a global sustainable development initiative that includes:

International Awareness: To promote an awareness of the unique challenges faced by rural desert communities in developing nations that stimulates active support from Western countries including financial support, manpower, and the provision of expert advice. Partner organizations will hold regular fundraising initiatives to raise funds for this and related projects.

Construction of an Australian Centre for Sustainability: The establishment of an 'International Education and Research Centre for Sustainability' in Australia will train western volunteers in sustainable water technologies in order to successfully work in the Indian

environment. As many parts of Australia face similar challenges of drought and salinity, the Australian centre will be devoted to investigating the latest range of innovative technologies to address these critical natural resource issues. It is anticipated that Australian centre will become a global leader into sustainable rainwater harvesting technologies offering itself as an information "hub" for rainwater harvesting projects around the world.

Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration:

The project aligns clearly with the objectives of Agenda 21 (especially Section 18 on freshwater) and the United Nations Millennium Declaration.

Meeting the Objectives of Agenda 21:

Section 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES

The Desert Rainwater Harvesting Initiative although focussing on rural communities in Rajasthan, is truly global in its approach, drawing on support from partners in five different countries to implement a sustainable approach to rainwater harvesting for drought affected rural communities in remote and poverty stricken areas of India.

Section 3: COMBATING POVERTY (also from Millennium Declaration)

The Desert Rainwater Harvesting Initiative will help to alleviate poverty in remote villages throughout Rajasthan by providing a year round supply of freshwater and implementing Village Water Action Plans to ensure sustainable water management and ownership at community level. A reliable water supply underpins the success of industry, health and environment and is therefore one of the crucial factors in the alleviation of poverty.

Section 6: PROTECTING AND PROMOTING HUMAN HEALTH

The Desert Rainwater Harvesting Initiative seeks to provide a reliable year-round supply of fresh water to the local villages alleviating water borne diseases that currently affect significant portions of the population. In addition the construction of check dams providing water for irrigation will ensure that local produce is available to villagers.

Section 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

A region specific integrated Village Water Action Plan will be developed through grass roots community involvement to determine how water is captured, allocated and delivered between users, and managed for long term sustainability. These plans will be developed within the framework of local and state Government policy. Combined with performance feedback mechanisms the project will become a blue print for other desert water conservation efforts around the world.

Expected results:

Please provide a brief description:

Sustainable Water Supply for 6 Drought Affected Rural communities in Rajasthan:

The initial phase of the Desert Rainwater Harvesting Initiative will involve the design and building of a culturally appropriate rainwater reservoir designed to capture and store 150 million litres of quality drinking water for villages in the Jadan area. In addition, Village Water Action Plans will be drafted and implemented to provide a range of on-ground catchment management actions designed to maintain year round reliable water supplies to surrounding villages.

The reservoir will supply water to the following humanitarian projects conducted by partner organisations in the initiative – some currently in operation and other still being developed. These include:

- Om Sri Deveshwar Mahadev Gaushala (Animal Refuge) which is neighbouring the Ashram and providing care for sick and disabled cows from the surrounding villages.
- Primary and secondary school for 250 students
- A naturopathic clinic supplying health care to local villagers
- 60 bed Naturopathic hospital – currently in the planning stage
- 80 bed allopathic hospital currently under construction
- Local Reforestation project for community education in the creation of sustainable watersheds

The Initiative will then be rolled out to 6 other drought affected communities throughout Rajasthan.

Improved local Environment

Through the development of an integrated Village Water Action Plan, a grassroots sustainable approach to watershed management will be developed and implemented. By involving the local community with support from Government agencies and NGOs, the Village Water Action Plan will involve a number of on-ground measures including tree planting in recharge areas, soil conservation efforts, fodder and livestock management and sustainable agricultural practices all contributing to increased biodiversity and an enhanced local environment.

Enhanced Public Health for rural communities in Rajasthan:

- Improved public health through the reduction of waterborne diseases
- Improved nutrition by increasing the amount of locally grown agricultural produce from a sustainable and renewable water supply

Reduction in regional poverty levels:

This initiative will result in increased levels of local employment primarily through the development of a sustainable agriculture industry. By providing a reliable and renewable irrigation water supply, the local economy that depends primarily on agriculture will be enhanced.

Development of a Sustainable Blueprint for other Desert Rainwater harvesting and conservation efforts

This initiative will provide a blueprint for other rural drought affected areas throughout Rajasthan and India with community involvement and reporting on all phases of implementation. It is also anticipated that this initiative will become a catalyst for other international partnerships to be created to address the growing water shortages in rural communities affected by drought in developing nations throughout the globe.

International Cooperation and Awareness

The project will utilize Australian and European teams of multi disciplinary specialists to provide expert advice, capacity building, community education and implementation of on-

ground works as required. An international awareness and fundraising campaign will be launched to awaken members of the developed world to the issues of global water shortages and the impact it has on the lives of an ever growing number of individuals in developing nations.

International Financial Support:

The expected Financial Support from International Partners is pledged to reach US\$200,000 by June 2003. An additional US\$300,000 funding from other sources is currently being sought.

World Peace

The project seeks to awaken the value of active participation in service in the lives of people world wide, thus contributing to a more harmonious global environment.

Specific targets of the Partnership/Initiative and timeframe for their achievement:

Specific targets for the Desert Rainwater Harvesting Initiative to be achieved by December 2002 include:

- ⇒ Research & Development into World Best Practice for Rainwater Harvesting and culturally appropriate methodology for Rajasthan India.
- ⇒ Establish a number of rainwater harvesting partnerships and cooperatives with NGOs and government agencies from around the world
- ⇒ Identify and create additional funding opportunities
- ⇒ Establish further Government support for the Initiative
- ⇒ Creation of a Desert Rainwater Harvesting Initiative website

Construction and Implementation Goals

A small scale reservoir was been completed, however phase one of the Initiative will see the transformation of this into a major reservoir utilising traditional and new rainwater harvesting technologies. Until other partner agencies are engaged, additional funding sourced and the Village Water Actions Plans designed, it is too early to set down concrete goals and timeframes for full implementation of the Desert Rainwater Harvesting Initiative. It is anticipated that once phase one is fully underway (after the WSSD), the initiative will be rolled out to the other desert communities throughout Rajasthan.

Coordination and Implementation mechanism

Please provide a brief description of the expected coordination/implementation mechanism of the Partnership/Initiative.

The Desert Rainwater Harvesting Initiative has been instigated and inspired by the international Peace Worker – Paramhans Swami Maheshwarananda – the founder of the 'Education and Research Centre' in Jadan and the 'International Education and Research Centre for Sustainability' in Australia. As the leading partner of the project the 'Education and Research Centre' is staffed by a combination of local villagers and international volunteers with specific expertise in areas of engineering, environment, agriculture and humanitarian care. This team of people will be assisted by volunteers from their sister center in Australia and will be responsible for coordinating the activities of the Desert Rainwater Harvesting Initiative. They will work closely with villagers, women's groups, other NGOs, local and State Government agencies to develop and implement the Village Water Action Plans to ensure the long-term sustainability of the initiative.

Once the initial phase of the Desert Rainwater Harvesting Initiative has been instigated in Jadan, six other locations throughout rural Rajasthan will be targeted. These are all in areas

where the lead partner has had a long term local presence, and support from the local communities.

It is hoped that links and partnerships with other NGOs committed to rainwater harvesting will be formed so that a blueprint can be used as a model for similar initiatives in other drought affected regions throughout India and the rest of the world.

Arrangements for funding

Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.)

The 'Education and Research Centre' in India currently has funding commitments of US\$120,000 for the initial stages of the project. Further funding will be gained through the contributions of the partner organizations around the world.

Regular contributions have been pledged by these partners and future fundraising activities are planned with local communities to simultaneously raise awareness of the issues of sustainable development in the drought affected areas of India.

While this level of funding is currently secured, the Desert Rainwater Harvesting Initiative will be seeking further funding opportunities and partner organisations at the upcoming World Summit on Sustainable Development.

Arrangements for capacity building and technology transfer

Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures:

The Rainwater Harvesting Project will facilitate training, informational support and capacity building in several ways including:

The Desert Rainwater Harvesting Initiative will be managed and run through the combination of the lead partner's 'Education and Research Centre' located in Jadan India and its sister centre in Sydney Australia. These centers will be charged with developing a working model for sustainable rainwater harvesting and water management at a village level for Rajasthan India. This working model will form the basis of the Village Water Action Plan which will be developed in conjunction with the local communities in the targeted rural villages throughout Rajasthan. By engaging the local community in all aspects of developing the Water Action Plan, the villagers will be empowered to implement sustainable water management practices and have ownership and a commitment to the ongoing maintenance of the rainwater harvesting devices.

All aspects of the Desert Rainwater Harvesting Initiative will be thoroughly documented and made available through the Internet. The initiative will be designed to be used as a blueprint for other Desert water projects around the world.

Please also provide here a brief description of expected arrangements for technology transfer (if applicable).

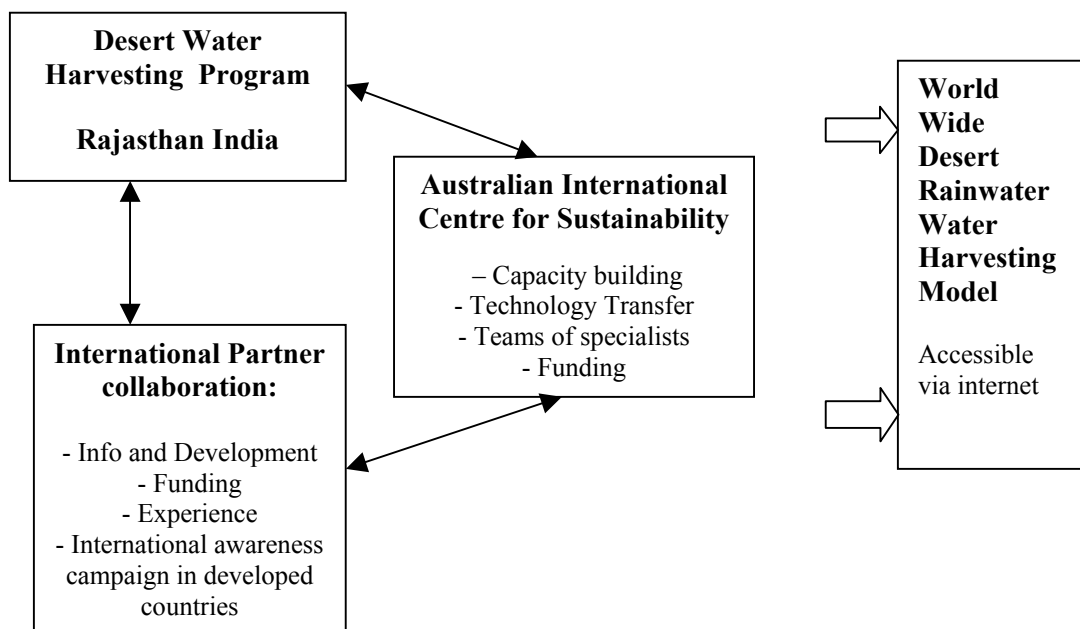
The Desert Rainwater Harvesting Initiative will seek to combine the latest freshwater technology from the first world with the traditional and highly effective methods used centuries previous in the area of Rajasthan.

Technology transfer will be maximized through the creation of an Internet web site that will facilitate the exchange of information on sustainable rainwater harvesting for drought affected areas. This web site will provide information and links to partner organizations from around the world involved in rainwater harvesting.

An 'International Education and Research Centre for Sustainability' in Australia will work closely with its sister center in Jadan India to develop the initiative and ensure that the technologies adopted are appropriate for the desert communities throughout Rajasthan.

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)

Please provide a brief description:



The role of the various partners around the world will be to support the Desert Rainwater Harvesting Initiative in the following ways:

1. Providing human resource expertise, experience as well as developed materials and manuals (OZ Green) that can be used in collaboration with local experts and community consultation.
2. To provide financial support through fundraising initiatives (the Yoga in Daily Life Associations around the world)
3. To develop a global model and central information point for rainwater harvesting activities around the world. The centre for sustainability in Australia with its associated advantages of access to technology and reliable business systems will be used to ensure that this is completed to a high standard.
4. To research and develop transfer technologies (Australian Centre for Sustainability)
5. To provide capacity building (Oz Green and the Australian Centre for Sustainability – training initiatives and the supply of international experts)
6. To raise global awareness of the issues of water shortage and the living conditions of people in developing countries (Yoga in Daily Life Associations world wide)

Further partnerships and participation in key rainwater collectives at the WSSD will be sought to secure funding, gain access to a wider network of resources and to share information on rainwater harvesting towards a global model and information exchange.

Monitoring Arrangements

Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD: (e.g. frequency/modalities of preparation of progress reports; electronic updates, news-letters, etc)

Construction Reporting:

Weekly reports prepared by construction manager to the onsite project team

Monthly reports sent via email to partner organisations with reporting on:

- Expenditure and Budgeting
- Activities summary
- Additional Information

Monthly Updates on progress of construction with recent photographs will go on the World Wide Web

Planned Operational Reporting

- Daily water quality testing reports
- Daily Volume reports
- Daily measurement of evaporation against climate report
- Weekly report on water usage and distribution
- Bi-monthly summary displayed on the World Wide Web
- 6 monthly community feedback survey on the uptake of sustainable development practices, water usage habits and general comments on the project

The Rainwater Harvesting Project Community impact study

- Employment changes recorded: Pre Project employment levels, dam construction employment level and long term employment levels
- Medical changes: Hospital and GP visit numbers recorded prior to Project operation and in each subsequent year after
- Cultural Impact: Qualitative study done prior to Project completion and post project construction on adoption of traditional customs
- Up-take of sustainable development practices: Effect of Water Awareness Campaign to be measured prior to program and 6 months post program (qualitative interview)

Other relevant information:

Project info available through www.yogaindailylife.org.au/rainwater (new site under construction)

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