# Permaculture Design Certificate Course

From 12th Dec to 23 Dec 2015

Conducted by

## Mr. Rico Zook and Mr. Narsanna Koppula

Who can participate: Students, Practitioners, Farmers, Farm managers who want to learn more about the designing sustainable systems (farm, garden, forests etc.) and improving the soil.

The purpose of this course is to spread the knowledge and promote practice of Permaculture. The course is designed according to local, seasonal geographical and climatic conditions, so that permaculture concepts can be tied in to locally applicable practices - with particular focus on dry / semi-arid climatic conditions.

Additionally, the course aims to disseminate information & stimulate discussions on below ideas:

- 1. Permaculture as a social responsibility.
  - 2. Applied Permaculture.
  - 3. Role of women in agriculture.
- 4. Traditional Indian Agriculture practices/ Permaculture practices.

Fees- INR 20,000 For Registrations - <u>aranyahyd@gmail.com</u> Foreigner 28,000 +91-9949062295, +91-9440881043

Location - Permaculture farm. Near Hyderabad, India.

# What is permaculture?

Permaculture is a design approach to create regenerative, sustainable systems. Envisioned over 25 years ago by Bill Mollison and David Holmgren, from Australia, it has now spread to over 120 countries. Though its conception was as a land based system, its effectiveness has moved it into urban settings and to being applied in various social, Economical, political and environments.

Permaculture is a contraction of the word "permanent agriculture" or "permanent culture." No civilization or culture can survive without a sustainable agriculture base and land use ethics -Bill Mollison.

Based on this philosophy, the ethical basis, the code of conduct for people is evolved and founded on:

- 1. CARE OF THE EARTH: Provision for all the life systems to continue and multiply,
- 2. CARE OF THE PEOPLE: Provision for people to access all those resources necessary for their existence,
- 3. INVEST SURPLUSES for above two.

The guiding principle is that the Permaculture based systems (farms, gardens, parks, homes, offices, buildings, cities) should be developed in such a way that one would find their needs within the system rather than depending on the external inputs.

## What is PDC?

The Permaculture Design Certificate (PDC) course is an internationally-recognized, 72-hour course resulting in a Permaculture Design Certificate. It provides an introduction to permaculture design as set forth by movement founder Bill Mollison.

The PDC serves as foundation for further permaculture work and study. Credit for this course is now accepted by a growing number of universities around the world.

The course covers sustainable living systems for a wide variety of landscapes and climates. It includes the application of permaculture principles to food production, home design, construction, energy conservation and generation, and explores alternative economic structures and legal strategies supporting permaculture solutions.

This PDC course is designed according to local, seasonal geography and climate so that permaculture concepts can be tied in to locally applicable practices -with particular focus on dry/semi-arid climatic conditions.

This course helps increase the Knowledge necessary for improving soil, developing water harvesting systems, and designing farms/gardens/homes in sustainable way. Attendees will get hands on experience of the techniques, steps and strategies that can be immediately applied in real world.

### PDC course Structure



The Curriculum is based on all Subjects in: Permacuture: A Designers' Manual and Introduction to Permaculture by Bill Mollison.

The PDC course will consist of two parts, with the intention of ensuring that the students get a quality permaculture education.

### Part I: Theory

The first part of the course presents the standard theory of the Permaculture Design Course taught by master Permaculturists who have completed hundreds of installations. Teaching is integrated with multiple farm visits to bring the agricultural and water harvesting methods to life through functional examples. Students learn how to integrate permaculture into any landscape and also the practical methods of application. (72 Hours)



<u>Option A</u>: Students chose a local farm and create a design. The group of students hear Instructors analyze the created designs and give feedback. This activity demonstrates the proficiency gained by the students & reinforces the concepts. (The length of this activity varies from one to four days depending on the number of students.)

<u>Option B</u>: A free one or two day workshop is set up and each student teaches some part of permaculture. This spreads the teachings of permaculture to the common farmer and gardener and demonstrates the student's ability to teach. (Student sessions are approximately 30 to 60 minutes depending on the number of students.)

### Certification

After successful completion of these requirements, Aranya Agricultural Alternatives will grant PDC certification.

<u>Note</u>: The Participants are invited to bring details of their own sites or potential sites to consider during the course.









## Detailed course Content

#### INTRODUCTION TO APPLIED PERMACULTURE

- What are permaculture principles.
- Need for the ethics in today's context.
- What is the need for applied permaculture in Indian context.

#### PATTERN UNDERSTANDING AND BROAD SITE DESIGN

- Identifying resources.
- Landforms (Things to keep in mind), Concepts of ridges and valleys, Flat lands Vs slopes etc.
- Climate: Indian seasons (Kharif, Rabi), Monsoon patterns, Other climatic influences in area.
- Soil: Fertility analysis, Soil types, Increasing soil fertility (Composting, Mulching & other methods).
- Water: Sources, Water harvesting (Swales, contours, trenches, bunds), Water management (Drip systems and other methods).
- Important infrastructure: Fence, Fence planting, Measuring the land: calculations, Patterns in nature and design (Elements of designs, Zone planning).

#### **STRUCTURES**

- House on farm.
- Cattle shed.
- Hen house.
- Bore well, Solar pump structures etc.

#### FARM HOME GARDEN

- Garden layout (Dry land gardens).

#### ORCHARDS, FARM FORESTRY AND FOOD CROPS

- Various orchards and forms for Dry lands: Diversity in orchards, Orchard preparations.
- Forest area design (context on farms): Biomass trees, Medicinal trees.
- Grain and other crops: Rice, Millets, Wheat, Cereal, Pulses, Oil, Vegetables, Others (According to climatic patterns).
- Seed Conservation, Seed preservation.
- Storage of crops and Management of post harvest.
- Basic biology of crops listed, Plant nutrient uptake (Science of nutrients in soil and how plants intake), what are macro and micronutrients, Basic pest management, Land and soil preparations, traditional soil fertility and pest management potions, rotation crops, inter crops, companion planting, nursery work etc.

#### ANIMAL HUSBANDRY

- Indian cattle and their care.
- Poultry integration.
- Goat and sheep integration on farm.
- Bees, their uses and integration on farm.
- Pasture and food needs for animals.
- Basic animal care.

#### COMMUNITY INTERACTION AND STRATEGIES

- Urban and rural inter links.
- Marketing and connections to customers.
- Certification

#### APPENDIX

- List of fence plants- Identification.
- Green manure and legume trees.
- Green manure crops.
- Medicinal plants and trees.
- Commercial timber trees.
- Seeds- identification.



# About the instructors - Mr. Narsanna Koppula

Click here to watch An Interview with Indian Permaculture Pioneer Narsanna Koppula of Aranya Agricultural Alternatives.

- Certificate holder in Permaculture from "Permaculture International Institute, Australia" & Post graduate from Osmania University in M.A. Philosophy & LLB.
- Dr. Venkat permaculture pioneer India was his mentor, while Bill Mollison and Robyn Francis are his teachers.
- Serving in the development sector for the past 27 years in various capacities. (a social grass-root activist to hosting of IPC 13 India in 2017)
- He is Secretary, Aranya Agricultural Alternatives for the past 15 years.
- Board Member of Permaculture Association of India. Worked with small & marginal farming community on Permaculture principles and ethics.
- Spent 12 years as Director and General Secretary (and in various other roles) of Deccan Development society, a premier NGO working on sustainable agriculture.
- Expert Permaculture (Permanent Agriculture) designer and is professional guide in efficient water use techniques in wet areas and water harvesting in dry & semi-arid areas. He is actively engaged in Tribal development through Permaculture Practices on their small holdings.
- · Project evaluator for various natural resource management projects and is involved in networking with several national and international organizations.
- · Keen professional publisher of books on sustainable agriculture.
- Travelled to Europe, Middle East, South & North America, South East Asia, Africa and Australia in context of promotion of Permaculture practices and sustainable agriculture in different parts of the world.

Narsanna Koppula is a Permaculture pioneer in India, campaigner of permaculture practices all over the world, nature lover, environmentalist and humanitarian working for cause of empowerment of rural communities. Forest being his first love, believes forest is the future and he spreads his message through his child "Aranya Agricultural alternatives" a nonprofit organization operational presently in tribal areas of Adilabad, also in backward areas of Medak, Khammam, Nalgonda and Ranga Reddy dist in Telangana & Guntur, Krishna and Praksam District of Andhra Pradesh India. While working with grassroots level communities since almost three decades, he is committed to the vision of achieving Ecological and sustainable Agricultural Livelihoods through Permaculture, and t Subsistence farming practices for healthy and non exploitative society.



## About the instructors - Mr. Rico Zook

Click here to watch: "A Conversation with Rico, my life story"

Click here to go to Rico Zook's Website: http://i-permaculture.org/

### Extract from Rico Zook's website:

With a degree in Environmental Studies focused on Land Restoration, minors in biology and philosophy, years of homesteading in northern California and working in Yosemite Nat'l Park, I came to permaculture with almost all the elements, but no organizing structure or system. From 1996 (when I first heard the word) to 2005 I was first co-director and crew foreman for the restoration crew, then land manager at a wilderness community decimated by wildfire in the mountain wilderness of Northern New Mexico. Guided and mentored by Ben Haggard, for ten years I did hands-on permaculture design and installation, rebuilding a community/village from the ground up.

For the past 19 years I have been a Permaculture designer, consultant and instructor working with private individuals, farmers, villagers and local organizations to create culturally and environmentally appropriate life systems in northern New Mexico, India, Cambodia, and places in between. This work focuses on assisting local and indigenous cultures to preserve traditional knowledge and technologies while adapting to and becoming active members of our rapidly globalizing world. Currently, my year is divided into 5 months in India, 3 months in Cambodia, 3 months in the states, and 1 month in a different place each year.