

SOUTHERN REGION CONSULTATION ON “CLIMATE CHANGE AND SUSTAINABLE AGRICULTURE”

Introduction

A 2 day workshop has been organized by the Food and Water Security Coalition, India at Accion Fraterna Ecology Centre, Anantapur, Andhra Pradesh on 25th and 26th September, 2009.

About 40 participants attended the consultation from 3 states i.e., Andhra Pradesh, Tamilnadu and Karnataka. The participants included grass root organizations (NGOs & CSOs), farmers, research & academic organisations, Government administrators. The distinguished participants included Scientists and Sustainable Agriculture proponents like Dr. Dwarikinath, Dr. Nammalwar, Dr Narayana Reddy, Sri V. Sobanadeeswara Rao etc. Scientists from ANGRAU A.P. Agri University, NDRI (Bangalore) and eco-friendly farmers from other states also participated.

Objectives of Southern Region consultation :

1. Understanding issues of food insecurity, agriculture crisis, farmers distress, climate change and rural livelihoods.
2. Impacts of Climate Change on food security, agriculture and livelihoods particularly rainfed agriculture in vulnerable regions.
3. To come up with strategies for addressing the above issues in a wholistic manner.
4. To suggest a policy framework to policy makers
5. Comment on India's National Action Plan on Climate Change (NAPCC).

Agriculture & Food Security- Problems

1. Green Revolution based Hi-tech agriculture is disempowering and displacing farmers as they cannot afford the expensive inputs
2. Globalization is promoting crops for global markets at the cost of local needs.
3. GR has added to destruction of land productivity, climate change and destroyed local crop patterns
4. Food production is limited to Rice and Wheat and concentrated in fewer pockets and food travels thousands of miles before it reaches consumers.

5. Farmers rely heavily on expensive & destructive agro-chemicals –wisdom of ancestors and experiences of alternate farmers is ignored.
6. People are falling into diseases with the polluted food they are eating.*1
7. Food production has reached its peak and even declining, leading of food insecurity.

Adverse effects of Climate Change on Agriculture

1. Increased variability in temperature adversely affecting the productivity of crops.
2. Increased variability in rainfall pattern i.e., High intensity rainfall or prolonged dry spells droughts. (uneven distribution of rainfall and shrinkage of rainy days) causing increased incidence of droughts and famines.
3. Rainfed agriculture which accounts for 70% of the area and 80% of farmers is severely affected. Affecting livelihoods of all small and marginal farmers in rainfed areas.
4. Increased incidence of pests & diseases.
5. The present seed varieties are performing poorly due to the variability in temperature and rainfall
6. Adversely affecting more the thermo sensitive crops.
7. Adversely affecting the cattle and livestock

Green Revolution Agricultural practices Creating & deepening the problems

1. Green Revolution Technologies are most ill-suited to Indian Agro-climate and socio-economic conditions.
2. GR Technologies are high-tech, high cost, high external input, most farmers cannot afford.
3. Dependent on agro-chemicals and polluting the environment i.e., soil, water, food, animals, people and causing climate change.
4. Focused on irrigation and neglected the rainfed agriculture.
5. The rainfed agriculture covers 70% of the land and 80% of all farmers.
6. Over 80% of all our farmers are small and marginal andtheir livelihoods are seriously threatened.
7. Promoting mono-cropping and destroying the traditional crop diversity.

8. Causing severe crisis in agriculture, farmers distress and farmers suicides.
9. Creating few zones of food production, mono-food crops and enhancing food miles and food insecurity.
10. 28% GHGs are from conventional agricultural practices.

Recommendations / Suggestions

1. A traditional Paradigm shift is needed from GR model of HEIDA to eco-friendly LEISA
2. Agriculture to be relocated based on local climate, eco-friendly and sustainable
3. Prioritizing rainfed agriculture, small and marginal farmers and their livelihoods, as against to irrigation and big farmers.
4. Improving pastures, community lands, regeneration of new plantations for enhancing bio-diversity and bio-mass
5. Reintroducing agro forestry in an intensive manner.
6. More tree cropping so as to produce bio-mass, fruits, fodder, fiber etc.
7. Integrating annual crops, tree crops and animals (Integrated Farming System)
8. Enhancing soil organic carbon through mixed cropping inter cropping & crop-rotation.
9. Promote decentralized food and nutritional security starting from household level to local and regional and drastically reducing food miles.
10. Freeing agriculture from Agro-chemicals and make it climate friendly.
11. Promoting local and on-farm production of all inputs like seed, manure.
12. Following Non-Pesticidal Management.
13. Enhancing in-situ rainwater harvesting and water use efficiency by increasing soil carbon and mulching.
14. Critical irrigation should be practiced to save rainfed crops and prevent droughts.
15. More equitable and judicious use of surface water and ground water.
16. Avoiding summer ploughings as the high intensity temperatures affects soil fauna & flora.

17. Reduction in number of tillages in agriculture operations (reducing use of energized machinery)
18. Creating awareness among the rural communities on the causes of climate change and about mitigation and adaptation.
19. Strengthening CBO and Community involvement and participation in order to achieve the goal of Sustainable Agriculture.

Policy Recommendations

1. Agriculture & environment policies to have a radical shift from GR model to eco-friendly, local specific and low external input.
2. Agriculture policies to shift its focus from irrigated agriculture to rainfed farming system.
3. Agriculture and environment policies to shift from production and use of agro-chemicals to local and on-farm production of bio-manures and NPM inputs.
4. Agriculture policies to promote Integrated Farming System instead of compartmentalizing into agriculture, horticulture, floriculture, dairy, livestock, poultry, fisheries etc.
5. Food policies to promote de-centralized, locally grown diversified food and nutritional security.
6. Agriculture policies to protect small and marginal farmers and diversify their livelihoods.
7. Agriculture policies to provide remunerative prices, local processing and marketing and create local employment.
8. Agriculture and Environment policies to focus on promoting crop diversity, bio-diversity in agriculture common lands, forest areas and diversified cropping, tree crops, local breeds of animals.
9. Reviving local breeds of animals like cows, buffaloes, sheep, goat, poultry etc.

Response to the document of National Mission on Sustainable Agriculture

1. The suggested action plan does not acknowledge the ill-effects of GR model on environment, agriculture, farmers distress and food insecurity.
2. It has shied away from acknowledging SA as the alternative

3. So, the much needed paradigm shift in agriculture is missing.
4. It promotes more dependency of farmers on expensive external inputs and external agencies
5. Its definition of SA here is not clear.
6. It does not bring up affirmative strategies for mitigation and adaptation except to make the entry of GE crops
7. No specific strategies on phasing out climate change inducing agro-chemicals and mechanization.
8. It ignores local knowledge and experiences of alternative farming which is eco-friendly and farmer-friendly particularly friendly small and marginal farmers and rainfed agriculture.
9. It does not address the growing food and nutritional insecurity.
10. Instead it advocates Genetic Engineering as a solution to the problem of climate change and food shortage.
11. It encourages profit organizations to do the research and development, with serious implications.

A detailed report is prepared and being printed on the discussions and recommendations by the CEC. It will be shared to ICCO & EED once it is printed