

# **Plan Document for**

## **Establishing a Comprehensive Relief and Remediation System for the Endosulfan affected community in Kasaragod**

*( Developed and approved in the Two Day Consultative Workshop on  
August 5<sup>th</sup> and 6<sup>th</sup> 2005 Organised by District Panchayath, Kasaragod )*

**District Panchayath, Kasaragod**

## **Background**

- Endosulfan, a Highly Toxic Organochlorine pesticide was sprayed in the cashew plantations owned by the Plantation Corporation of Kerala (PCK) of Kasaragod District (in Kerala State) since 1976, three times each year.
- Ill effects of this spray were noticed in animals since 1980's and in human beings since 1990's. From 1996 onwards there has been public protests against the spray, and in 1999, following a case filed by Smt. Leelakumari Amma of Pullur-Periya, the Munsiff of Hosdurg issued a stay on aerial spraying of pesticide in Periya plantation area of the PCK. Following this the case was taken to the Kerala High Court, and other groups like KSSP, Kasaragod JillaParisthithi Samrakshana Samithi (KJPSS), Thanal, ESPAC, Punchiri, etc followed with further petitions and protests.
- After much public struggle and legal battles the use of endosulfan was banned in the Kerala State through a High Court order in 2002. The State Government also ordered a ban on the use of endosulfan in 2004.
- The Ill effects of endosulfan – varied and dreadful in nature have been reported from atleast 12 panchayaths in the district. All these panchayaths are situated amidst the cashew plantations. A few panchayaths bordering the cashew plantation have also reported health impacts.
- The District Panchayath in consultation with the various organizations and the Health Department has identified the following intensively affected panchayaths where remedial and relief measures have to be undertaken in the first phase.  
Kumbadeje  
Bellur  
Karaduka  
Enmakaje  
Pullur- Periya  
Cheemeni  
Panathadi  
Mulliyar  
Badiadka  
Kallar  
Ajanur
- All medical studies conducted have identified the causal factor for the health impacts as the long and continuous exposure to endosulfan. The most important of these studies were the study by the Indian Council for Medical Research -National Institute of Occupational Health, Expert Committee appointed by the Kerala Government, Indian Medical Association and a medical team led by PANAP-Thanal-Community Health Cell.

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- Since 2003, the District Panchayath and the District Administration with the help of the Health Department and the Calicut Medical College has conducted medical camps, specialized medical camps and initiated treatment for identified victims.
- Local groups like ESPAC and Punchiri started remediation work with minimal support raised locally and through friends from within and outside the state/country.
- In 2004, the District Panchayath, the District Collector and local groups submitted various proposals to State Government to start relief and rehabilitation work. The State Government in repeated public statements commits to providing relief to the affected.
- These measures were significant to address the concerns of the community viv-a-vis the issue on an emotional and psychological context, but was highly inadequate to provide relief and remediation especially in the long term.
- The measures initiated were only short-term and were based on inadequate information and knowledge about the impact of the chemical on the health of the community. The inadequacy were mainly in the assessments regarding the geographical area of the impact, its toxicity and mode of action – long term and short term, acute and chronic and its consequent manifestation – in intensity and variedness.
- Discussions held in June-July 2005 between the District Panchayath (DP), Thanal, ESPAC, Punchiri, KSSP, KJPSS, Endosulfan Virudha Samithi and other groups brought forth the need to address the issue comprehensively with the help of medical and social experts in the field. In the District Study Congress 2005 (July 30-31<sup>st</sup> 2005), the District Panchayath declared its plan to organize a consultative workshop.

### **The Consultative Workshop**

- The Two Day Consultative workshop was organised by the District Panchayath at the District Panchayath Conference Hall on 5<sup>th</sup> and 6<sup>th</sup> August 2005. Thanal helped organize the workshop with the active support of all the other groups.
- Grama Panchayath Presidents, Members, Doctors from the PHC's, Health Inspectors and Activists from all over Kasaragod participated in the workshop. There were 79 participants in the workshop.
- The District Collector Sri Minhaj Alam and the District Panchayath President Smt Padmavathi presided over the workshop and actively involved in shaping the plan document.

## **Workshop Agenda**

### **5<sup>th</sup> August 2005 - First Day**

- Inaugural Session – was chaired by DP President, Smt. E Padmavathi, Sri Moideen Kunhi Kalanad, Vice President, DP
- Presenting the objective of the workshop – Sri. Sridhar R, Coordinator, Thanal
- Sessions I - Status of Remediation –
  - Dr Y S Mohankumar (Local Doctor and ESPAC member)
  - Dr Abdullah (District Medical Officer-DMO)
  - Dr Padhmanabhan (Asst. DMO)
- Session II - Expert Presentations –
  - Dr Rajmohan (ICMR-ROHC-NIOH) – presented a frame work for the plan
  - Dr Suresh kumar (Calicut Medical College) – presented the Neighbourhood based Palliative Care (NNPC) system
  - Dr U V Shenoy (Kathurbha Medical College) – presented the impacts on children
  - Dr Ravindranath Shanubhog (KMC) – presented the toxicology and also various possibilities of care and relief
  - Dr Abdul Latheef (Retd, Principal, Calicut Homeo College) – presented the possibility of Homeo treatment
  - Dr N D Jose (District Ayurveda Hospital) – presented the scope of Ayurveda in treatment of diseases in the area.
- Session III – Open Discussion presided over by District Collector, Sri Minhaj Alam,IAS

### **6<sup>th</sup> August 2005 - Second Day**

- Presentation of the Draft Plan– Sri Sridhar R, Thanal
- Discussions from the floor
- Finalising the “Comprehensive Remediation and Relief Plan” – Presided by District Collector, Sri Minhaj Alam,IAS, District Panchayath President – Smt E Padmavathi
- Valedictory function presided by DP President Smt E Padmavathi, Sri Sanjeev Rai, Sri Minhaj Alam,IAS, District Collector and members of the DP.
- Press Conference and Declaration of the Plan

## **The Comprehensive Remediation and Relief Plan**

The Comprehensive Remediation and Relief Plan was unanimously agreed upon by all the participants of the workshop. The plan is detailed in this section. It shall address the following themes :

- Policy
- Health
- Social
- Environmental
- Structural/Implementation
- Financial

This will form the broad framework for setting up the relief, remediation and rehabilitation systems and is expected to address the issue in its totality.

### **Policy**

It was decided that the District Panchayath, the District Administration and the Grama Panchayaths shall make the following policy decisions and in coordination take necessary steps to adhere to it so as to effectively formulate proposals and implement them based on the plan developed here.

1. Full implementation of the ban of Endosulfan in the District.  
*The Hon'ble High Court and the State Government has banned Endosulfan in the State of Kerala. Nevertheless, Endosulfan happens to be available and illegally used even in Kasaragod. The stock of Endosulfan in the PCK plantations also needs to be returned back or safely contained. The ban of endosulfan is strictly needed for effective implementation of the relief measures.*
2. Phase out Chemical Pesticides in the District in five years.  
*The continuing use of chemical pesticides in Kasaragod would make the remediation plan ineffectual, as these chemicals could further contaminate the already affected people, and it is known that such synergistic reactions can cause health problems. Moreover, medical relief would be ineffectual if people were exposed to more and more chemicals.*
3. All Local Self Government Institutions (LSGI's) to resolve to move to Declare Kasaragod as Organic district.  
*Declaring Kasaragod as an organic district in the lines of the State Government move to declare Wyanad as an organic district would provide the necessary policy and state government backing to implement alternate systems of pest and disease control as well as for research in these directions. It would also make it imperative on the farmers to adopt safer methods of farming and crop protection.*

4. Develop and Implement Community based Organic certification and Local standards.  
*Declaring Kasaragod as an Organic District and planning for it would also mean that the small, marginal and landless farmers of Kasaragod would have to be guided to develop their own local organic standards and certification, so that they will not fall prey to the global pressure to certify their products and would be able to ensure safe food and crop production and also find ways to establish profitable, alternate local markets. Thanal with experience in developing local markets and local organic standards shall assist in the process.*
5. Establish a Special Purpose Cell for Implementing Relief, Remediation and Rehabilitation. This Cell shall act as an interface between victims and all relief measures, and shall be also be the window where potential funders, supporters, relief-givers can come to join the programme.  
*The Cell should be of an autonomous nature with enough administrative and financial powers to take immediate actions whenever necessary. It should act fast, take informed decisions, and be transparent and accountable in its operations. It should have a reaching out nature, and should not be a system where the victims with all their hardships have to come for relief.*
6. The District Panchayath, the District Administration and the local Grama Panchayaths shall declare their long term commitment to the remedial and relief plan developed here. It shall also be notified through specific Local Self Government Orders (LSGO's) and Government Orders (GO's) and shall be such as to be valid for the next two-three decades ( 20 to 30 years).
7. The various plans now submitted to the Government should be harmonized and be brought under the Special Prurpose Cell and implemented through it.

## **Health**

1. To Conduct a Comprehensive Family and Individual data generation by door-to-door survey in each Panchayath and establish database.
2. Perform an Analysis based on the data generated to identify the diseased and healthy for initiating welfare measures.
  - *Dr Rajmohan of the Regional Occupational Health Centre, Bangalore ( ICMR) has been requested to help develop the questionnaire and also help analyse and develop a system to identify the diseased and healthy vis-à-vis their relation to endosulfan. He would prepare the questionnaire for collecting family and individual data and in consultation with Dr Mohankumar and Thanal.*

- *Local volunteers and college students shall be involved on a voluntary basis to conduct the survey. Thanal has volunteered to provide necessary guidance for the comprehensive survey process.*
  - *As the data generated is medical in nature, the study should follow ICMR standards of ethics.*
3. Identify and categorise diseases and a treatment protocol by consultation, counseling, case study analysis and integrating the different system of treatment.
- *It is recognised that along with allopathic medical systems of treatment, many of the diseases seen in the villages, especially the chronic and the congenital type have effective treatment in ayurveda, panchakarma, homeopathy, yoga and other alternate systems.*
  - *Consultative workshops, multi-system medical camps etc need to be planned.*
  - *The facilities available for the various systems of medicine in the district need to be strengthened after determining the needs.*
4. Establish a Continuing medical assistance system.
- *The only experience in India of such dimensions is the Bhopal tragedy and the subsequent remediation system setup there especially by the Sambhavana Trust. This needs to be studied. A group of doctors, and the implementation officers of the Cell along with members may visit Sambhavana Trust to gain first hand experience of such a process.*
  - *A planning workshop may be called for developing a plan for this.*
  - *Cases which need special medical care and assistance should be treated free of cost at such referral centres.*
  - *Proper maintenance of medical records – for each treated person so that it can used to track the frequency of complaints, correctness of diagnosis and effectiveness of treatment.*
5. Establishing a Disease surveillance system – with both short and long term screening.
- *A community based surveillance system to be established on the lines of the declaration of the People’s Health Assembly (PHA). Organisation like the Community Health Cell, Bangalore to be involved.*
  - *Specialised surveillance systems is also needed for specific problems like Cancer, Endocrine disruption, Reproductive Health problems among growing youth – both boys and girls etc*
6. Establish a Community based monitoring , Long-term and Palliative care and redressal system with the support of the Calicut Medical College.
- *Identifying local volunteers in the wards and villages to establish the community based monitoring system.*
  - *A proper compilation and documentation of the change in cancer rates and other long term complications etc should be done.*

- *The survivors of the disaster themselves can be volunteers in the scheme.*
7. Medical officers and nurses from the PHC's and CHC's shall be deputed to the Calicut Medical College for NNPC and setting up of nodal centers to support community based monitoring and redressal system.
    - *The full support of the Health department to be ensured for the functioning of this system of long-term and palliative care.*
  8. Special schools / Special Educators for the mentally challenged shall be established.
    - *Special schools are needed to give specialized education to the mentally challenged and students with learning disorders. Experts and Institutes with experience in these areas may be consulted and their guidance sought.*
    - *Special Braille system teaching shall be imparted to blind children and such schools established, if found needed*
    - *The special schools need to be established considering proximity of clusters of such cases, so that too much travel for these students can be avoided.*
  9. Special remediation systems in School/Anganwadi's shall be established to take care of the endosulfan affected children through Kudumbasree health volunteers /neighbourhood facilities/ICDS.
  10. Day-care centres shall be established with trained volunteers at the Ward/Cluster levels.
    - *Most of the affected have problems of mobility – especially cases such as cerebral palsy and has to be carried. Hence the day-care centres for these children should be as close to their homes as possible. Hence such clusters of homes may be identified and day-care centres for such children be started, to be run by local community itself with trained volunteers with the support of the grama panchayaths and local PHC's. A system similar to the NNPC of the Calicut Medical College may be adopted for this.*
  11. Medical Aids for physically-challenged affected people - like spectacles, wheelchairs, hearing aid, walking aid etc shall be supplied.
  12. Drug supply stock to be maintained and provided to identified specific cases and continuous monitoring established.
    - *Patients identified with chronic illnesses that needs medication for a long term like diabetes, has to be ensured smooth and free supply of medicines and should be continuously monitored.*
  13. A Special Endosulfan Survivors Medical care credit card or health card to be established to cover the treatment.

14. A Special programme for Care givers relief shall be established in the locality.
  - *Care givers are the parents/elder siblings of seriously affected children. These are the people who are to look after the sick children, sometime for very long periods and these care givers may also need to be taken care off with relief measures. Such local relief systems need to be established for them.*
15. Special assistance to be given to mothers with seriously affected children.
16. Special measures for rehabilitation of orphaned survivors to be established.
17. Financial Compensation shall be paid for all deaths and serious illnesses.
18. Special assessments of ailments and problems affecting women to be sensitively carried out and remedial measures to be established.
19. Conduct Health assessment and establish relief measures to PCK workers.
20. Supplementing nutritional deficiencies through time bound relief measure - locally made food with involvement of SHG's.
  - *Nutritional deficiency and protein deficiency is known to aggravate the problem of pesticide exposure, hence the affected must be supplied with nutritious food.*
  - *Producing such food from locally available organic crops would also provide an employment for local SHG's.*
21. Assessment of training needs local and district level.

## **Social**

1. The socio-economic conditions of the affected victims to be assessed and necessary relief to be provided.
  - *Many of the affected victims live in very poor living conditions with no access to basic amenities and are sometimes even – houseless and without access to any sources of income etc. These matters add to the pain of the victims and need to be mitigated. The District Administration has already proposed improving and providing basic amenities such as houses, electricity, some road access etc for the victims.*
2. Interventions in the affected population to change their depressed state of mind - change makers and confidence building.
  - *Professional counselors and volunteers to be asked to help in the process of building confidence among the affected, who are sometimes not ready to even speak of their disease and is suffering in silence, and is fatalistic.*

3. Vocational training and Livelihood Rehabilitation - for differently abled children and youth.
  - *A team of trainers to be developed to impart training in sustainable livelihood options, which are eco-friendly and also have a good market. Market support for the products should also be given.*
4. Monthly financial support scheme for the affected and their dependents.
5. Livelihood Rehabilitation and empowerment through Skill training, management training, enterprise development and planning and marketing support.
6. Create action plan for converting existing farm land to organic farms.

### **Environmental**

1. Periodical Monitoring and assessment - water, soil, food, flora and fauna – to document change and levels of toxicity.
2. Research in remediation systems – and developing community based monitoring of public health and environment indicators.
  - *The process should develop a community based public health and environmental indicators which should then be used to monitor change in biodiversity, quality of the environment and to learn how human / technological actions change the quality of life in an area.*
3. Awareness building leading towards pesticide free district - a programme like mass literacy programme to be established.
4. Revival of mid land hills and eco-systems of the Kasaragod District.
5. Watershed based revival of biodiversity in PCK land and Common lands.
  - *The landscape of Kasaragod District has drastically changed in the last 50 years especially with the plantations changing the biodiversity rich midland hills into a monoculture and this has changed the quality of life in the area, even as it has poisoned thousands of people. It would be necessary to start pilot projects with small pieces of land in the PCK plantation area itself to see how biodiversity can be revived and productivity maintained in terms of ecological value as well as food crop production.*

## **Structural / Implementation**

1. A District level special purpose cell to be setup under the District panchayath-as an independent multi-stake holder, transparent and quick redressal system to plan and coordinate the district level work.
2. This Cell - The Endosulfan Victims Relief and Remediation Cell - shall have the following constitution
  - Chairperson – President, District Panchayath
  - Convener – District Collector
  - Special Officer – Social Welfare Officer
  - Members – Presidents/Standing Committee Chairpersons of Grama panchayaths, Health Department (Allopathy, Ayurveda, Homeopathy), Concerned line departments, Community organizations (ESPAC, Punchiri), Environmental/Social organisations (KSSP, Thanal, KJPSS) etc
3. Local Implementation Cells to be formed at the Grama Panchayath level for immediate monitoring and interventions. These Cells shall be chaired by the Grama Panchayath President.
4. Decentralized ward level coordination should happen at the cluster/ward level.
5. Proposals for each of the components shall be developed with the guidance of the various experts and in consultation with the members of the Special Cell and these proposals be submitted to various authorities. Time and Action plan with cost estimates must also be done for each such proposal.
6. Periodical review meetings to be held at district level to assess the progress of the relief and remediation work.
7. In the Initial phase, Social auditing should be conducted quarterly, and may be done at a longer interval after the first four years.
8. The system established should be responsive, transparent, accountable and should have a clearly defined management system.
9. A Website to be developed to share the issue, make appeals, fund raising and to update regarding activities.

## **Financial**

1. Based on the proposals developed an assessment of the financial needs shall be done.
2. Groups that can financially support with grants, equipments, medical aid, taking care of patients etc shall be identified. Govt. agencies, Government, PSUs, Banks, Trusts, NGOS private individuals and institutions, Hospitals and NRIs are the possible target of appeal.
3. Fund raising events, release of special stamps, post cards, poster exhibitions etc would be conducted to raise funds for the cause.
4. A Special “Endosulfan Survivors Relief Fund” would be started and be operated under the Special Cell.
5. A global appeal would be put through various media and websites to generate financial and other support for the disaster affected.
6. Monitoring and Social Auditing will be institutionalized for ensuring dispersal of relief at the required time and required place.
7. A separate committee would be setup as an expert group to monitor and guide the relief and remediation work.

## **Conclusion**

The two day workshop has entrusted the District Panchayath to form the Special Cell and promulgate a formal order declaring the Remediation and Relief Plan and the setting up of the Special Cell. The management system for conduct of the Special Cell shall be formed and the various action plans for the implementation of the plan would also be developed by the Cell, in consultation with experts in the respective fields.

The Endosulfan Victims relief and remediation plan would need to be implemented in the District for atleast 30 years based on a long-term vision and it is hoped that it would render health and environmental justice and relief among the affected people. It would also be a reminder to the future that such disasters must be avoided at whatever cost, in the name of humanity.

## **Acknowledgement**

The District Panchayath wishes to acknowledge and thank all the people who with concern for the victims of endosulfan spray had come together to develop this plan document. It specifically wishes to convey its gratitude to the District Collector, Sri Minhaj Alam who not only attended both the days workshop but has initiated a major relief proposal, and would help lead the remediation plan implementation as the Convener of the Special Cell. The District Panchayath also wants to put on record its gratitude to the Indian Council of Medical Research , specifically the Director, Dr H N Saiyyed and the doctors of the National Institute of Occupational Health who helped identify the problem. Dr Rajmohan has conceded to associate with the implementation of the relief plan which he helped develop in the workshop. We also thank the doctors of the Kasthurbha Medical College, Dr U V Shenoy and Dr Ravindranath Shanubhog and the Calicut Medical College, specifically doctors of the special medical camp team and Dr Suresh kumar of the Palliative Care Unit. The various line departments of the Government, Doctors from all the systems of medicine had come together, and the integration among the various systems of medicine to treat the diseases is a very important decision taken in the workshop. Thanal, Kerala Sasthra Sahitya Parishad (KSSP), Endosulfan Spray Protest Action Committee (ESPAC), Punchiri Arts and Sports Club, Kasaragod Jilla Paristhithi Samrakhsana Samithi, Endosulfan Virudha Samithi had been actively involved in the struggle to ban the chemical endosulfan and to provide relief to the victims of the human disaster. Their services will be needed through out the implementation of the plan. The DP also wishes to acknowledge the participation of the Grama Panchayaths, the DP members and all the staff, for making this plan development possible.

The Implementation of the Plan calls for collective and sincere effort from all the people involved and that shall be its challenge in the coming years.