

**HIGH COURT LEGAL SERVICES COMMITTEE, BANGALORE  
BEFORE THE REGIONAL LOK ADALAT  
AT MYSORE**

**DATED THIS THE 06<sup>th</sup> DAY OF SEPTEMBER, 2014**

**CONCILIATORS PRESENT:**

**HON'BLE MR. JUSTICE L.NARAYANA SWAMY**

**AND**

**DR. A.N.YELLAPPA REDDY, MEMBER**

**W.P.NO.13473/1998 (PIL)**

**C/W**

**W.P.NO.33645/1998 (PIL)**

**IN W.P.NO.13473/1998 (PIL):**

**Between:**

Belandur Gram Panchayat Karyalaya.

**.. Petitioner**

**And:**

The Government of Karnataka,  
By its Secretary, Minor Works  
Irrigation Dept., and others

**.. Respondents**

**IN W.P.No.33645/1998 (PIL)**

**Between:**

Ms.Subhashini K.Reddy

**... Petitioner**

**And:**

Chairman (BWSSB) and others

**... Respondents**

**ORDER**

The Regional Commissioner and all Deputy Commissioners of the Region.

On 6.9.2014 the following general directions were issued to all the Deputy Commissioners and concerned officers including, CEOs, DCFs, DHOs, Watershed officers, officers of KSPCB and others.

1. During the discussion we came to know that despite of Government's flagship programme for universalisation of elementary education included a specific provision for separate toilets for girls and boys. Presence of toilets and learning levels of children to cultivate sanitary habits and to keep the toilets clean, we found the functional toilets are yet to take their position. The Hon'ble Supreme Court asked the States to submit status report of the functional toilets in 2012. Our State filed a written affidavit that they had met the requirement for toilet with right to education norms etc. During discussion we found there is great deal ambiguity on whose responsibility is to ensure functional toilets with adequate water facility.

2. The District administration are yet to construct children friendly and functional toilets at Anganwadis, where children will

acquire a culture to use toilets. They have been directed to attend to this work on priority and construct functional, children friendly toilets and train the children to use the toilet and maintain cleanliness in and around the toilets. Some of the officers expressed certain constraints but the Regional Commissioner has expressed that there are no issues which comes in the way of constructing toilets. Only problem is if the Anganwadis are functioning at private buildings they have to take consent from the private building owners to construct the toilets at their cost or it should be recovered from their rent in installments.

3. Very recently the Government of India has taken a decision and directed the States to utilize the NREG funds upto Rs.35,000 to 45,000/- for Anganwadi and community toilets on the condition that they ensure water supply.

4. During discussion the question arose if toilets are is not functional, then who is to be held responsible and also it came to our notice that there is no provision for cleaning toilets. The children and teachers should be encouraged to keep the toilets clean. But many teachers will not involve in this enterprise. It needs rethinking and workable mechanism has to be put in place fixing the responsibility.

5. The teachers and the children also require training in maintenance of toilets etc. The sanitary inspectors and environmental engineers should impart necessary training to the teachers and supply some of the tools where they can clean the toilets by using the tools and also other materials like disinfectants etc. We will not hesitate to revisit these areas again and again and also to evolve appropriate strategies to maintain the basic hygiene and sanitation.

6. They should also visit all Government hostels more particularly the girl hostels where Social Welfare Dept., Women and Children Dept. is supposed to provide all facilities to the inmates of the hostels. For the reasons best known to them this facility which is most essential is suffering from all kinds of problems and the inmates are the victims. The District administration should take serious action on the wardens/officials concerned for their failure in maintaining the functional toilets especially in the girl hostels. They have been directed to file an affidavit within two months after attending the above directions without fail to the Regional Commissioner. Regarding private buildings are concerned, they should convince the building owners and execute the toilets within three months. Regional Commissioner should compile district wise

list of Anganwadis, Government schools, hostels furnishing the execution of the directions issued.

7. Declaring eco-sensitive zone of Cauvery river right from its origin till it enters Tamil Nadu boundary is found to be imminent by considering the present ecological status of the rivers in the country. The recent Jammu and Kashmir tragedy, Uttarkhand tragedy very clearly explains the environmental factors that underlie the tragedy which shall have to be given a hard look.

Main issues to be looked into are

(i) Ecological degradation caused by unplanned development and urbanization;

(ii) failure to preserve wet lands;

(iii) the wet lands, tanks, ponds act as a sponge and their reclamation as serious repercussions on the main river body.

8. Bombay Natural History Society has investigated and came out with their findings that the reduction of wet lands, siltation of tanks and ponds are the main causes for the tragedies of Jammu and Kashmir and also Uttarkhand.

9. It is needless to say that sudden cloud bursts are occurring all over the world without any warning. The drought monitoring cell of the Karnataka State is one of the pioneering institute compiled

the rainfall data and commissioned village panchayath wise automatic rain gauge centers. The District Administration should obtain the rainfall patterns from last one decade village panchayath wise. This information will reveal the intensity and distribution pattern panchayath wise. By using this data each taluka should identify the vulnerable areas especially the main river and major tributaries of cauvery basin. The Deputy Commissioners of Kodagu, Chikmagalur, Hassan, Mandya, Mysore, Chamarajnagar should jointly prepare an action plan of identifying vulnerable areas and extent of encroachment and destruction of wet lands, loss of tanks, ponds etc and take necessary steps to evolve very scientific flood control systems and the Cauvery Nigam engineers, ZP engineers, MI engineers to jointly prepare an action plan for maintenance embankments and forecasting systems of intending disasters to the adjacent villages and colonies.

10. The Deputy Commissioners of Mangalore and Udupi should identify the Kumardhara and Netravathi basin and all other river basins of west flowing rivers and compile the information as mentioned above and identifying vulnerable areas.

11. It is needless for us to recall that there is a state disaster management authority and also district disaster management

authority. The district management apparatus are found to be missing. Therefore, they are directed to prepare a district disaster management apparatus in which they should indicate the encroachment of river beds, flood plain area, destruction of ponds, lakes and wet lands, flood channels and other water bodies which serve as absorbing spongy systems. The Cauvery Nigam, watershed management, forest authorities instead of adhering to strait jacketed mindset, they should collectively prepare strategies to prevent the disasters by utilising the scientific data and information available in the State such as Remote Sensing Dept. Drought Monitoring Cell, Watershed Dept. Cauvery Nigam and all these organizations/institutes including the district administration comprising engineers of ZP, MI, major and minor canal divisions and CADA etc should evolve apparatus zone wise to avert the disasters.

12. The Drought Monitoring Cell has already compiled the information of sudden cloud bursts and extreme weather events whose frequency is on the rise and it is undeniable climate change foot print. So far the State has not thought of about climate change issues. Therefore, there is a need to recognize the link between climate change disaster and demand justice for the victims.

Therefore, there is an imminent need to identify populations vulnerable to disaster arising from climate change and mindless development which includes the following interventions as stated by expert committees. The Hon'ble Supreme Court has sought the report from the Governments where quarrying, sand mining, even road forming and construction of idle projects have contributed to increase the scale of disaster. Therefore, there is a need to identify vulnerable sensitive zones.

13. The Cauvery and other tributaries are also losing their character due to various human activities. Under the above said circumstances the Cauvery river can be divided into three to five segments depending upon the intensity of the human activities and other hydrological interconnections such as ZP Tanks, MI Tanks, command area, etc. The Deputy Commissioners, Kodagu, Mysore, Hassan, Mandya, Chamarajnagar, Bangalore Urban should consult Cauvery Nigam Chief Engineers, Forest Officers, ZP Engineers, Revenue Officers to identify the ownership of the paramboke lands survey numbers declared as protected government lands on either side of the river bank. They can obtain this information from Remote Sensing Dept. with the help of digitized imageries and clearly identify the boundaries of the paramboke land in the

Cauvery River Bank and its main tributaries like Kabini, Taraka, Noogu, Sarathy, Harangi, Lakshmanteertha, Shimsha, Hemavathy etc. After identifying the river banks of main river body and its main tributaries the extent of the river bank under encroachment and other activities which is disturbing the smooth stream flow to be identified.

14. They should also prepare a vegetation map indicating the composition of the vegetation on the river bank and also at the Sangamas i.e., where the tributaries joins the main river needs to be identified and a separate thematic map of the vegetation composition, siltation of the tributaries should be located. If frequent floods occur in the river body due to flash floods which are induced by disrupting the land forms and wet lands. The impact of deformations on the habitation should be identified so that action to be taken to prevent flash floods which causes havoc on crops and life and property of the villages situated along the river bodies.

15. In addition to above they should also prepare a thematic map indicating the extent of command area and its drainage pattern to the river body due to reverse flow of command area water which drains into river body with chemicals like fertilizers, herbicides, pesticides etc. After identifying the vantage points

where irrigated water drains in the form of reverse flow to the river body will have high concentration of chemicals especially nitrates which will cause eutrication and also affects the fauna and flora of the river. It also causes semi-dead zones and dead zones due to eutrication.

16. To address this issue of contamination the cost effective technology can be developed by forming a suitable wet land with aquatic vegetation. This intervention will mitigate the problem to a great extent and improve the fauna and flora in the river body and the quality of the drinking water will also improve considerably. During the discussions Professor Srinivas Murthy of GKVK and JSS College Environment Department and Mysore University Environment Department subject specialists can also be involved to design appropriate protocols of wet lands at suitable sites so that the concentrated nutrients and pesticides impact can be reduced to a great extent and the wet land can be used as a productive asset to produce high value resources of products like acorus (baje), duck weeds, cattails, Centella, Hydraverticellata and other aquatic indigenous vegetation should be propagated and planted at appropriate zones of the wet lands. If need be in consultation with the experts they can also build an activated carbon columns to

absorb heavy metals and other toxic substances. This river has got an extra ordinary ability of self purification if appropriate bio-remediation protocols are incorporated appropriately.

17. The Deputy Commissioner, Kodagu, Mandya and Chamarajnagar have done a commendable job of addressing the above issues, but it requires further progress as indicated above. We are hopeful that the Deputy Commissioners will pursue the issues as directed above and submit a comprehensive report involving all stake holders including Cauvery Nigam.

18. Adalath also discussed about steps taken to protect the endangered Masheer fish right from Virajpet to Tamil Nadu boundary. The DCF, Cauvery wild life, the Deputy Commissioner, Kodagu and other Deputy Commissioners have expressed that serious action has been taken against the poachers who use dynamites to catch masher fish. To a great extent, these treacherous practices by poachers have been reduced. They have been instructed to take stringent action against such people who indulge in this heinous practice of dynamiting the river body and killing the entire aquatic fauna. By protecting and interlinking the wet lands, percolation tanks, ZP tanks and MI Tanks on either side of the cauvery river, to a width of 300 Kms will go in a long way to

enhance the inflow during the lean season and quality of the water will improve in many folds. The wet land vegetation will provide very productive habitats for aquatic fauna, which consumes the organic matter and converts into high value resources to the adjacent habitats. The local communities can be involved in harnessing the high value resources without impairing the productive system. They should be taught harvesting the technology and post harvest management practices so that they can generate not only the fodder protein rich fish food and many other natural resources from the very productive wet lands. The tragedy is our adjacent State is taking full advantage of our inability to produce the required fish to our cities. For eg. Bangalore alone receives about three to five hundred tonnes of fresh water fish everyday from neighboring States that means we are loosing few crores of rupees which should help our villagers by increasing the productivity of fish by using all our natural assets in a planned way. The fisheries dept. should prepare a comprehensive plan in ideally suited localities to convert unproductive or partially productive wet lands into a produce assets where it provides employment and protein rich food.

19. We came to know that some agencies have introduced cat fish to clean up the river at KRS and other places. It is a most dangerous predatory species which breeds profusely and destroy the native fish and habitats. They should take adequate steps to address this issue in consultation with fisheries department.

20. The Cauvery Nigam should coordinate with all concerned officers and prepare a thematic map as explained above and prepare a comprehensive management plan to improve the inflow and incorporate appropriate eco-friendly technologies to improve the vegetation composition of aquatic fauna and flora in the entire stretch of Cauvery. They should file an affidavit indicating District wise action plans to develop and improve the wet lands, river body, vegetation, protection of masher fish etc. without fail in the next Adalath.

21. The Deputy Conservator of Forest, Cauvery Sanctuary has also reported that plastic is being discarded to the river which is causing a problem to the productivity of the river fauna and also wild life which entirely depends on river water for drinking in summer months. They also reported the presence of predatory cat fish which is highly dangerous. The DCF should talk to the

fisheries Dept. and take action to catch and reduce their population so that the native fish habitat can be protected.

22. This entire stretch of the river is the lifeline of Karnataka and also forms a most important habitat for migratory birds like endangered Gray Pelican, Painted Stork, Herons, Spoonbill, Egrets etc. They play a very important role in enriching the agricultural field through their droppings and help in increasing the agricultural production. The cattle egrets play a great role in feeding the root borers when the farmers ploughing their land. Therefore, the habitat development all along the river course is very vital to maintain the health of the river body and highly productive sensitive ecosystem of the Cauvery river. Cauvery river ecological status today may not be as bad as Ganga but it is deteriorating very rapidly. Therefore, this action is absolutely necessary in the interest of preventing further ecological deterioration which may reach a point of no return if we fail to act now.

23. The Deputy Conservator of Forests, Kollegal, Cauvery Game Sanctuary have identified the bird habitats where rare birds are found in this habitat near Wesley bridge. There are many spots where wide range of bird species have selected the breeding and feeding habitats in and around the Wesley bridge. The Deputy

Commissioners of Chamarajnagar, Mandya, the DCFs Mandya, Kollegal, Cauvery Sanctuary, DCF Ramnagar should identify the feeding and breeding habitats of wet lands especially the migratory ones and also resident birds up to Tamil Nadu border. After identifying the location all Government lands and critical private lands which are essential to improve the feeding and breeding habitat of the birds can be identified and the locations should be declared as sensitive habitats.

24. Sri Devaraj, retired DCF has developed Ranganathittu sanctuary in a systematic planned way and innovated cost effective simple technologies to safeguard the breeding habitats during flash floods, which used to occur very frequently. He also developed the Ranganathittu surroundings in a planned way. He is stationed at Mysore, his services can be utilized to develop the above sanctuaries and other habitats.

25. The Cauvery Nigam, Chief Engineer and MD and other officers including Forest Officers should go through the Ramsar Wet Land Convention protocols and incorporate all the protocols and guidelines in developing the wet lands.

26. Ramsar wet land convention is one of the important convention signed by Government of India to protect and preserve

the wet lands. They are directed to fulfill the mandatory obligations of improving the wet land all along the river so that the inter-connections for feeding and breeding of native fishes and aquatic fauna is vital to maintain the riverine eco-system. They should carve out locations to extend protected places to improve feeding and breeding habitats all along the river cauvery and prepare eco plans which should be inclusive and shall have to be included securing the livelihood of the people. The Deputy Commissioners, Chamarajnagar, Kodagu and Mandya should identify critical habitats on Government lands and they should set aside the spaces for wild life for wet lands and declare as protected areas on priority. They should submit an eco plan without fail in the next adalath.

27. In the last adalath we have issued instructions to the DCFs, Kollegal, Mandya and wild life to identify the sensitive water shed areas of Government lands and to develop all such hilly areas which are severely degraded due to fire and grazing to be developed as water shed areas. The watershed development officers and watershed commissioner and all concerned officers of Nigam should also prepare a watershed plan for the areas around Cauvery river so that to enhance the inflow of water during summer months. They should take action to restore the Kalyanis, gokattas,

located inside the hilly zones and also adopt comprehensive check dams to harness rain water and to increase infiltration. As directed by the Adalath the DCF, Cauvery Sanctuary and DCF, Bandipur have taken action to supply subsidized natural gas to the communities living adjacent to the forest. This has helped in a big way to cater their energy need and the community is not entering the forest to procure fuel wood which is used to increase man and animal conflict due to accidental deaths while collecting them. In addition to above, the DCFs have taken action to construct farmer friendly fences to a cluster of farm lands in Bandipur and in Cauvery Sanctuary these are very positive steps initiated by the Forest authorities yielding fairly good results. Unfortunately, the senior officers are not participating in the discussions inspite of repeated observations. Their presence will help to get their technical inputs in undertaking several development works like restoration of degraded lands, rejuvenation of fruit stock plants, developing common lands, creating silvi pastures, undertaking agro forestry, urban forestry and very many other issues addressed above, like protection of masher fish etc. All things falls under EP act and wildlife Act, but their presence is found wanting to view technical inputs. The Addl. Chief Secretary, Ecology and

Environment and Chief Secretary should issue necessary directions to all the Chief Conservator of Forests to participate in the discussions in the Adalath and guide their juniors and other district officials. They should be given strict instructions to come prepared with Regional Commissioner and Deputy Commissioners before coming to the Adalath and also share their technical inputs in the District level meetings also and seek full cooperation of all district officers to improve the ecosystems and to restore degraded lands and to create natural assets and to improve the livelihoods of the communities etc.

28. In almost all regional meetings their presence is not being felt and absence has been observed which indicates their disregard to this important activity. It is needless for us to say that the forest officers have to play a very important role in the aspects of climate change, restoration of degraded lands, improving the livelihood and improving the watershed areas, conserving the rare and endangered species and protect the biodiversity etc. Their role and participation and responsibility seem to be not forthcoming. The Chief Secretary should issue strict guidelines to all the Chief Conservators stationed in every district to involve, participate and

to prepare a meaningful eco plans and guide their junior colleagues and other district officers.

29. Absence of the CCFs and senior forest officers is felt when some of the NGOs appealed and brought to the notice of Adalath about various aspects of forest wildlife, urban eco system, management aspects. For e.g. they appealed about violation of Tree Act by girdling the trees in the urban area by indiscriminate nailing and demarking to display advertisements etc. Their complaint is Tree officers are not enforcing the provisions of the Tree Act to protect the trees from the individuals who indulge in causing deep injuries to the trees. Once they cause a deep wound it facilitates entry of fungus and stem rot and root rot will kill the tree. Automatically the life of the tree will be reduced besides causing deaths due to accidental tree uprootals.

30. The Tree officers should examine these aspects and submit a detailed report to the Adalath about the injuries inflicted by the individuals and the adjacent land owners or the persons who display their advertisements by causing injury to the trees. They should book them under Tree Act and EP Act and other Acts of destroying the Government properties.

31. The Deputy Conservators should report about the formation of tribunals and the cases booked and appealed to the tribunals etc. Each town and also in the villages Tribunals to be notified and the procedures of the Tree Act provisions should be informed to the general public so that the community and the individuals will not indulge in violation of the provisions of the enactment.

32. In the Adalath some DCFs have reported about uprootal of Lantana in the Game Sanctuaries as per the directions of the Adalath to improve the feeding habitat to the wild animals. Lantana has become a big menace in the sanctuaries and wild life are starving and migrate in search of food to the adjacent agricultural fields. One of the NGO has suggested and well known NGO – ATREE also has innovated the technologies to convert the Lantana twigs into a baskets. The biomass can be converted into a compost etc. The Department of wild life wing should contact ATREE who have used the services of tribals to convert Lantana into the baskets etc. NREG funds can be utilized and tribals can be engaged to cut and convert Lantana into various other products. The finished products can be sold at a subsidized rates through tribal societies in sandies (sante) and can be sold to the farmers

etc. The Chief wild life and Chief Conservator should examine these aspects and submit a detailed report in the next Adalath.

33. Some of the NGOs have reported that the forest officials are not involving in urban forestry and providing necessary technology to facilitate to harvest rain water by forming appropriate saucers to trap rain water etc. Therefore, they should examine various sections of the Tree Act and take appropriate action about disfiguring, causing injuries and displaying all kinds of advertisements by girdling the trees etc. They should prepare urban tree management plans and train all civic authorities including the BESCO officials who indulge in indiscriminate tree lopping and cutting root systems while laying UGDs and other pipelines.

34. Every year nearly half of Karnataka suffers from drought and half from floods. On 12.04.2014 United Nation Intergovernmental panel on climate change has given a starkest warning of the likely impact of climate change in their report which is comprehensive and provided abundant evidence of ground water depletion and its impact. It also warns that all countries and all social classes of people will be affected it would be severe – pervasive and irreversible. It also mentions the risk of extinction of

rich bio-diversity of the tropical countries apart from increase of sea level and its impact. Most of it is human induced. Therefore, every District need a climate change adaptation technologies. The DCs and other concerned departments should prepare comprehensive adaptation technologies. Adalath continuously remind it to identify the degraded lands unutilized, waste lands, agricultural waste lands, fallow lands, common lands etc. Here the forest, watershed department and various other departments should prepare a comprehensive action plan of adaptation technologies to address the issue of floods, droughts, fodder security, water security region wise. They are directed to scrutinize and analyze the rainfall patterns where the Karnataka Government drought monitoring cell, remote sensing department has compiled very useful data which can be utilized to design appropriate site specific, zone wise innovations involving each panchayaths etc.

35. The Agriculture Dept should prepare suitable soil maps to indicate waterhold capacity and conserving organic wastes, leaf litter waste, agricultural waste into a resource to mitigate the adverse impacts.

36. The Secretary, High Court Legal Services Committee is directed to supply the copies of the reported judgments of Hon'ble

Supreme Court and High Court in connection with environmental issues to all the Deputy Commissioners. So also the Pollution Control Board is also directed to bring to the notice of all the Deputy Commissioners in respect of the recent reported judgments of the Hon'ble Supreme Court and Hon'ble High Court.

**MYSORE DISTRICT:**

1. The Deputy Commissioner has filed an affidavit that formation of ward committees is yet to be formed. They are directed to take steps to form effective ward committees both in the urban and rural areas and also they should organize children grama sabhas. In the Adalath the inputs given by children about their basic needs has helped the district administration to a great extent to address the important issues. Therefore, they should take action to give priority to form the children gram sabhas and ward committees so that the district administration should get first hand information to provide basic amenities to the community and to the children.

2. Mysore city has established a huge infrastructure to treat sewage water. But due to various reasons many STPs are not functioning. The Pollution Control Board and the environmental engineers of local bodies should visit each and every STPs and

monitor the log books maintained to find out the quality of the treatment provided before discharging to the tanks and to valleys. The Environmental Engineers and Pollution Control Board engineers should file their affidavits independently about the functioning and quality of the treatment given in Mysore city and also in other cities of the District.

3. In para 6 the Commissioner has given a job chart to the Environmental Engineers. The Environmental Engineers should provide the information about the various mechanisms innovated and evolved to dispose the solid and liquid waste, the STP and healthcare waste etc.

4. Efforts taken to make all temples free from plastic, is appreciated but they should take serious action on the temple staff who are meant to prevent this visual pollution.

5. The CADA, Mysore has stated that nearly 12000 ha. is affected by salinity/alkalinity. About 8000 ha. has been reclaimed after reclamation what type of protocols were enforced should be reported. After reclamation if suitable protocols are not enforced the expenditure incurred will become in fructuous. Therefore, the CADA should report the enforcement mechanisms evolved to prevent recurring of salinity/alkalinity.

6. Mysore Municipal Corporation has taken initiative to convert organic waste and recycle waste and also evolved sharing mechanism. It is a good step forward and they should increase this activity and convert Mysore city into free from plastic and all other wastes. Transporting vegetable waste to Pinjrapole society is also a very good step.

7. Regarding disposal of chicken waste needs greater attention because the poultry farms situated in and around most of the towns are using antibiotics in feed given to chicken for faster growth and to prevent infection during hatching. Antibiotics found in the chicken's liver, muscle, kidney are tetracycline, doxycycline, fluoroquinolones such as enrofloxacin and other antibiotics etc., which are highly resistant strains of bacteria. These resistant strains will be passed on to the humans who consume them.

8. In the inedible parts i.e., poultry waste of feather, bones are transferred to soil groundwater, ponds and streams. The resistant bacteria in the chicken gut gets into the environment and influences the microbes to develop resistance to the anti-biotic. So it is imperative to take urgent steps to deal with misuse of antibiotics in the poultry industry. The District Administration of all the Districts and District Health Officers should take to ban the

use of antibiotics for growth promotion. They should also take steps to prohibit use of antibiotics in the feed. There is a need to set pollution standards by veterinary department and need to install pollution control systems to limit transfer of resistant bacteria and antibiotics from poultry farms to the environment. There is a need to develop integrated surveillance system to monitor antibiotic resistant in human and animal food chain. It should be treated on priority because microbes grow fast and their generation time minutes and hours, it is not days. Therefore, their chances of mutation and time involve to generate new strains are far for less than other animals. Therefore, fighting microbes with new antibiotics which are resistant to all kind of bacterias is being detected. Once it invades the eco systems it is hard to win the battle. Therefore, the District administration, Veterinary Department, DHO, Pollution Control Board of all the districts should evolve monitoring system to prevent discard of poultry waste in the general waste. They should insist the chicken factories to segregate and to take adequate precautions to dispose scientifically.

9. Adalath appreciates the efforts made by the local body to generate revenue from the waste. They should publicize the efforts

made by them. The copy of the job charts for environmental engineers is a good move but the job chart enclosed is not visible. They should send a legible copy of the job chart for information. The Director, Urban Development should go through the job chart and issue necessary directions and modifications to all the environmental engineers who come under their jurisdiction to the entire State and they should submit a copy of the job chart issued to them in the State for information of the Adalath.

10. Adalath appreciates the efforts to make plastic free Dasara and their attention is drawn to highway and also the forest authorities and should pay attention to improve greenery on either side of the highway by attending the trees planted and should undertake to replace the casualties by planting tall plants.

11. The above instructions are applicable to all the Municipalities and local bodies.

12. The general instructions issued regarding Anganwadis, government hostels etc. should be strictly implemented. Regarding waste management in the rural and converting the waste into a resource should be enforced in every gram panchayath. Suitable incentives should be provided.

13. The result of conducting children gram sabhas and the nature of deliberations and the inadequacies identified by children should be documented and attended. The highlights of such deliberations and inadequacies should be documented and attended on priority.

14. Regarding protection of water bodies around Mysore city a huge investment were made but effective use of STPs is found to be not satisfactory. They should indicate the quantity of the STP used for non-potable purposes.

15. The desilting work was completed in many of the lakes but the quantity of the water and its quality should be indicated. All their inflow channels should be maintained to make the water bodies functional.

16. Regarding encroachment and eviction of tanks should be accomplished without fail and action to be taken to protect all the water bodies and their inlets so that to maintain the inflow to the water bodies.

17. The Executive Officer, Chamundeshwari temple has stated in the affidavit para 4 that the temple authority has put the board relating to the prohibition of use of plastic etc. They should identify all the vendors and seize the plastic material and they

should engage some volunteers or rag pickers to collect the plastic discarded and impose a nominal penalty to the devotees who discard the plastic. Similarly, the Executive Officer, Nanjangud also take steps to prohibit use of plastic by the temple authorities and also the devotees and vendors.

18. The Assistant Director, Fisheries the year wise achievement of revenue but not mentioned anything about the hazards like pollution, dynamites, encroachments experienced in all the major rivers and type of threats etc. He should furnish a detailed segment wise ecological status and precautions to be taken to protect the riverine habitat and aquatic plants and animals in all the rivers and tanks in the district without fail. In the previous adalaths the habitat destruction, breeding habitat destruction and other threats have been discussed but the fisheries Director seems to have not been shown any concern about the discussions of the lok adalath. There is no need for lok adalath to give a specific direction but it is his responsibility to report the problems encountered by destroying the breeding habitats and other threats of pollution, dynamite etc.

19. The CADA officers should ensure and enforce strict regulation of scientific protocols to prevent salination after

reclamation and indicate the type of enforcement mechanisms evolved after reclamation by spending huge amount.

20. After sanctioning the community rights to the tribals, the Project Coordinator, ITDP should provide suitable management strategies in consultation with the forest, wild life and revenue officers to the tribals so that the community rights provided should be properly enforced and implemented to the community, wild life and forest. The Project coordinator should educate the tribals about their duties to protect the forest from fire etc. They should also adopt practices to enrich the forest by growing non-timber products in their community lands which are mostly animal friendly. The project coordinator should also make necessary facilities to develop the market mechanism to the tourist who are visiting jungle lodges and other resorts. He should contact with the help of the Deputy Commissioner and convene a meeting of all the resorts and the executives of the jungle lodges in the District and develop a marketing mechanism of the products generated by the individual tribals and also the community tribals in the district. So that the tribals should get the maximum benefit from the product generated by them. They should be properly trained to process all the products which they are collecting and producing.

21. The Conservator of Forest, Bandipur Tiger reserve has furnished figures without indicating any other information about man and animal conflict, fire hazard and various other issues encountered by him and the communities in and around Tiger reserve. He is also silent about the unauthorized resorts which are taking advantage and creating problem in the management of the project tiger reserve. He is also silent about steps taken to improve the ecological status of the tiger reserve by improving the water bodies and habitat so that the animals should confine to the reserve.

22. The important fodder species like Kydia (Bende), Bamboo, formation of man made wet lands etc and planting of ficus species and other animal friendly species is found to be very essential but there is no mention about such developmental activities in Bandipur which is a pride of Karnataka.

23. The DCF, Territorial and the tribal welfare officers should organize a meeting of all the resorts and jungle lodges to facilitate the marketing system of the produces generated and collected by the tribals in and around Mysore District, so that the community should get reasonable profit for their products. The Tourists who visit may prefer to have various curious materials gathered by the

tribals. They should be trained to give a face lift for the natural materials collected by them and to be disposed as curious items to the tourists. It would go in a long way to provide a meaningful livelihood and they should become participants in the management and protection of wild life and to enhance wild life tourism, their services can be utilized to share their traditional knowledge. So far the administration has totally eliminated them from the developmental activities. The Chief Conservators, District Administration and other concerned departments should prepare a strategy to involve the tribal community in the management protection and to earn their livelihood from the wild life tourism. They should become stake holders in the wild life tourism and they are entitled for a share of the profit obtained by the Tourist Dept. They should think in this direction and submit the proposals to the Government in sharing the profit to the tribal communities. For tribals animal friendly and NTF species should be supplied at free of cost to improve the growing stock in and around their habitats and also the habitat development for wild life by involving the tribals should be encouraged by utilizing NREG funds. The DCF, Social Forestry, Wild life, Territorial and tourism department officials and private resorts should collectively prepare an action

plan to involve the tribal communities in improving the growing stock of NTF, wild life habitat and skill to prepare curious materials and the produces gathered and produced by the tribal community so that they can become partners in the tourism development and wild life conservation and protection. The Deputy Commissioner should initiate this programme and submit a comprehensive action plan in this regard.

24. Pollution Control Board and the Chief Inspector of Boilers should prepare onsite and offsite management plans and also indicate the steps taken about the enforcement of red alert systems in and around red category industries.

25. The Deputy Commissioner is directed to enquire about the menace of invasive plant which is threatening Nilgiri biosphere reserve. It came to the notice of the Adalath that one of the exotic species were introduced by the wing of Social Forestry of Kerala or Karnataka the name of which is Sennaspectabils and it is invading the biosphere reserve and growing very fast and occupying the canopy and inhibiting the growth edible grasses and other species. These species is not edible and eradicating all edible natural vegetation with the result the herbivorous are starving and moving out of the habitat. The elephants and the tigers directly or

indirectly depend on the edible grasses, plants and other natural indigenous biodiversity. The report mentions it is invading very fast and occupying the canopy and preventing the natural regeneration of indigenous species. The Deputy Commissioner is directed to write to the Chief Conservator, Wild Life, Chief Conservator Project Tiger and other concerned people to make an assessment of the impact made by these exotics in the wild life sanctuary. They should also contact the Government of India Research Centre incharge of biological control stationed at Bangalore to explore the methods of introducing species to regulate and eliminate the menace of *Sennaspectabilis*, *lantana chamera* etc. This is the cheapest and best method to eradicate the method of alien species to safeguard the tigers and elephants and other herbivorous. The Forest officers concerned should be directed to submit a detailed report about the situation and action taken to mitigate this problem.

**MANDYA DISTRICT:**

1. The Deputy Commissioner, Mandya has submitted the compliance report for all the ULBs. They have been directed to make efforts to garbage free, plastic free and sewage free local bodies and towns. They should also make efforts to convert all

urban waste into resources. The Deputy Commissioner has also filed an affidavit stating that all the ULBs have formed the ward committees. They should prepare a manual indicating the responsibilities and duties of the ward committees and they should select the citizens who are concerned and have got some technical expertise to guide the health inspectors, poura karmikas and also the councilors. Similarly, the ward committees of the Gram panchayaths should select competent concerned to guide the members and also the general public to motivate for citizens to improve hygiene of the towns and villages. The waste generated is a resource and they should convert waste into a resource and utilize for the benefit of the municipality of the gram panchayaths.

2. The Chief Officer, Srirangapatna has mentioned that they are treating 1.30 MLD of sewage water but he has not mentioned the mode of disposal of treated water. He should plan to utilize the treated water profitably. He has also mentioned that in addition 1.39 MLD another STP of 2.22 MLD was commissioned. He has submitted plan to utilize the entire treated water from the Srirangapatna Town for non-potable purposes. Srirangapatna being a Tourist Centre they should insist to utilize the treated water for gardening in the Star Hotels and also other commercial centers for

their gardening and other purposes instead of using potable water. Other towns also commissioned STPs but the CEOs should report the mode of utilization of treated water for non-potable purposes like gardening, building construction and watering of parks and gardens.

3. The Deputy Commissioner is directed to instruct the DCF to take up improvement of roadside plantations in Bangalore Mysore Highways so that the tourists should who are visiting Dasara should get a good impression about the proper maintenance of road side plantation and the road side should be free from plastic and other garbage. Special directions are issued in this regard to instruct all the CEOs, ZP, PDOs to use the services of the NSS students and pouira karmikas to give a good impression about Karnataka by maintaining the highway free from visual pollution. The Forest officers should be instructed to take up replacement of causalities and to carry out the weeding and restoration of tree guards wherever they are disturbed.

4. The Forest officers both social forestry, water shed department, revenue dept. should prepare a plan to develop common lands like gomala etc under the control of the government as common property resources. They should involve the Gram

panchayaths and motivate them to adopt to develop the common lands for the benefit of the communities in their panchayaths to improve the condition of the pastures and also gokattas etc. They should also take intensive tree planting for the benefit of the community to generate NTFs for the asset less people. They should utilize NREG funds efficiently to create assets.

5. The Forest officers should be directed to take up urban planting and also planting in industrial estates. They should plant selected species to offer sound ecological services to the communities.

6. The Adalath appreciates the efforts made by the Deputy Commissioner and all concerned to identify the wet land in the District and also steps taken to improve the ecological status and to notify as a sensitive areas is also very essential to improve the quality of the water and quality of fauna and flora on either side of the river bank. These wet lands will play a immeasurable role in improving the quality and ecological status of the river body. They should take appropriate steps to prevent all kinds of poaching, encroachments and dumping of garbage sewage etc to the wet lands and to the river bodies.

7. The Deputy Commissioner should engage the services of the Environmental Engineers to prepare an ecological status report of each wet land and also the compositions existing and they should prepare a plan to improve the ecological status by planting aquatic plants like cat tiles, duck weeds, acorus and all other useful species to improve the growing stock of wet lands etc. In addition to Ranganthittu protection of adjacent wet lands is equally important to provide a breeding habitat to the water fowls especially the migratory birds who come for breeding.

8. They should launch awareness to the farmers to appraise them about the benefits the farmers are going to get by protecting the feeding habitat of the water fowls visiting their lands and wet lands. They should also take steps to prevent killing of water fowls etc. Adalath appreciates the efforts made to document the salient features of the wet lands. They should also display the sign boards indicating the ecological role of aquatic life and bird life. They have taken a very positive steps to form taluka level and sub divisional level committees to protect the otters and all other endangered species in the river cauvery.

9. The Deputy Commissioner should prepare an ecological status report in the entire length of cauvery and the wet land

located along the cauvery river and also prepare the ecological benefits accrued by protecting the fauna and the flora. They should educate the villagers about the importance of protecting the river cauvery failing which it may lead to the crisis situation of ganga and other rivers. They should identify the critical areas which are contributing to pollute the wet lands and the river and also those who are encroaching etc should be prevented by displaying the boards and if possible they should create live edge along the border so that the boundaries of the wet lands can be preserved.

10. The Deputy Commissioners of Mysore, Chamarajnagar and Kodagu should also prepare the similar document for river cauvery in their districts and prepare a detailed management plan for improving the ecological status. The forest officials, cauvery nigram officials, water shed officials, CADA officials should jointly evolve strategies on the lines the district authorities planning to improve the ecological status and breeding habitats of the wet lands and river body. The Deputy Commissioner has undertaken an inventory of Gaganchukki island. He should take action to cancel all the grants in ecologically sensitive area which were granted long back and left fallow. If there are enclosures under cultivation he should also propose to acquire or to grant alternate

land so that the ecologically sensitive zone should retain its integrity by preventing bio-tech interference by human beings and their domestic animals. The islands once if it develop as a habitat for wild life especially elephants and other endangered species, it will go in a long way to provide a safe habitat for the Asian elephants and other carnivora. This island can be developed as a habitat of sandalwood and other valuable host species of sandal so that entire island will become a sanctuary of sandal reserve. This sandal reserve will become a unique model to depict the global queen of aroma and her associates. Sandal is the only species which has very wide range of host plants and has got very broad ecological status to attract birds and other fauna. The Deputy Commissioner should take special interest and direct the forest, watershed, CADA and cauvery nigam to prepare a joint action plan involving the local communities as stake holders in this project to protect and preserve from sandal smugglers and poachers.

11. The Deputy Commissioner is directed to identify all gokattas and kalyanis in the district and take up restoration of all the kalyanis and gokattas. They have given a very good name called “Jalasiri” on the same slogan entire district’s kalyanis, percolation tanks, gokattas should be rejuvenated.

12. The Joint Director of Agriculture has furnished the details of consumption of nitrogen and other fertilizers in the District taluka wise. Total quantity of nitrogen consumed works out to 93000 tones and other fertilizers also. But among them, nitrogen fertilizer will induce eutrophication and accumulation of nitrates in the eco system. As discussed in the meeting the services of the subject specialists of Agriculture University should be utilized to mitigate the adverse impacts of excess consumption like urea. Similarly the consumption of pesticides, fungicides and herbicides also appears to be quite high. Especially 36000 kgs of herbicides is being consumed in the district which induces chemical imbalances and also contributes for accumulation of toxic substances in the sediments of wet lands and also in the water bodies. By looking at the consumption pattern of fertilizers and pesticides the CADA, Nigam and Agriculture Dept. should prepare an ecological status report of micro organism's status and macro and micro nutrient status in the command areas. Biodynamic of the command area study is also very essential to assess the productive ability of the irrigated lands. Already huge extent of the land is losing its biodynamic ability due to toxicity and large area is becoming saline/alkaline. Therefore, preparing gram panchayathy wise status

report and to involve the communities to adopt appropriate technologies of growing green manure crops and declaring holidays for cultivation to improve the ecological status by giving handsome compensation can be examined. They should consult the experts and the farming community to adopt a strategy to identify sick lands and to adopt appropriate sound technologies to improve the biological, ecological and nutritional status of the sick lands. They should submit proposals to pay handsome compensation to declare crop holidays to save mother earth from further deterioration.

13. Adalath appreciates the efforts made by the Deputy Commissioner and his colleagues. He should take forward the issues discussed to improve the productivity of the irrigated lands and to improve the ecological status of river and wet bodies and they should also evolve a strategy to reduce the consumption of chemical fertilizers.

14. It came to the notice of the adalath that the poultry factory waste needs greater attention because of excess induction of antibiotics and other chemicals. The District administration is directed to go through the directions issued to Mysore and adopt the measures to segregate and dispose the poultry waste more carefully instead of discarding to the eco system. Once this waste

enters, the bacteria will undergo mutation and develop their own habitat of resistant strains. Therefore, to consult health and veterinary dept, Pollution Control Board and adopt strategy to dispose these waste scientifically.

### **KODAGU DISTRICT:-**

1. The Deputy Commissioner has mentioned about monitoring the quality of the water by Pollution Control Board but the results of quality of the water should be furnished. He has taken action to establish wet lands to prevent contamination of river body and formation of district to keep vision is a very good step to protect river body from pollution.

2. The Executive Engineer, ZP has identified 680 tanks but only 29 tanks restoration were completed. The progress appears to be not satisfactory. They should increase the tempo of restoration of lakes. The UGD work and STP works are under progress, the Deputy Commissioner should vigorously monitor the progress and insist the concerned to complete the work and also STPs. The local bodies should utilize the treated water profitably for non potable purposes. Even though Kodagu receives good rain fall but in

summer month there will be shortage of water. They should adopt a strategy to utilize this treated water for non potable purposes.

3. The Pollution Control Board has identified several water bodies which falls under the category of 'A'. They should adopt appropriate technologies to maintain the quality by preventing entry of untreated coffee pulp and other industrial waste and sewage water. Adalath appreciates the efforts made by the Deputy Commissioner and his team to implement most of the directions issued by the adalath especially to preserve the river body free from pollutants and also to protect the habitat of Masheer fish.

4. The quantity of fertilisers and weedicides consumed is quite high that is about 87000 tones. They should motivate the people to switch over to more organic eco friendly practices to prevent ecological disasters due to chemical imbalances going to be settled in plantations and paddelites. They should consult agriculture universities and prepare appropriate strategies to restore the chemical imbalances and to improve the biological status of the soils. If need be they should also identify sick lands and to declare crop holidays wherever required and they should recommend to the Government reasonable compensation to improve the health of the productive soils. The Cauvery Nigam,

water shed, forest, agriculture and coffee board collectively to prepare a present ecological status report and steps to prevent further deterioration due to excess application of chemicals and fertilizers.

5. Before revoking the closure orders, they should ensure that they have adopted safe practices of treating the coffee pulp effluents.

6. They should pay greater attention to prevent sand mining, quarrying in ecologically sensitive areas of the District, especially the semi-evergreen water supply catchment contributes immensely in maintaining the stream flow during summer months. Any physical destruction in the critical water supply catchment area will have serious implications. Therefore, they should take adequate steps to prevent quarrying, sand mining and also road formation where the underground stream flow will be disrupted. They should examine before granting permission for road formation and restore the hydrological regimes. US Government has taken a very massive step of banning formation of roads in the hilly areas in 2006 because the road formation will disturb the hydrological regimes. Michael Dombeck and his team of experts have convinced the Government, water is more important than even

communication. There should be adequate precautions to prevent any such activity which will disturb water veins and arteries in the cauvery water supply catchment which will have serious implications on stream flow during pinch season.

7. The Forest Dept. Water shed Dept, Cauvery Nigam should identify very important water supply catchment areas and prepare an action plan to declare as most sensitive water supply catchment areas of the cauvery basin. This step of rejuvenation and subsurface flow will go in a long way to improve the stream flow during summer months and maintain the inflow level to all dams constructed. Since one decade most of the dams built in the cauvery basin are suffering with acute shortage of inflow during summer months and in most of the rivers the water level has reached very low and even the wild animals are unable to get drinking water even in the major dams. They are forced to migrate in search of water. This clearly speaks the gravity of the situation. Therefore, in the larger interest of the wild life as well as to maintain the minimum level of flow to supply drinking water should be the priority. Hence, augmentation productive water supply catchment areas by all concerned should be the priority. They should utilize the NREG and water shed funds and nigam

funds to reforest and to protect existing forest and wherever required physical intervention vegetative check dams etc should be constructed. So that the rain water should infiltrate and increases the subsurface flow. The Deputy Commissioner and all the concerned officers should prepare a comprehensive action plan to preserve, protect and develop the water supply catchment areas of Kodagu district.

8. Rejuvenation of MI tanks, ZP tanks and gokattas in water supply catchment areas should be attended on priority so that these water holds will play immeasurable role in maintaining hydro ecological role in the water supply catchment areas of cauvery basin. In the name of development any deforestation activities, quarrying activities, sand mining activities shall have to be prohibited in critical water supply catchment areas of the basin and declare as hydrologically and ecologically sensitive areas.

9. The forest authorities should pay attention to raise only native species and avoid establishing exotic plantations in the forest areas especially in the water supply catchment areas. They should plan to establish two tyre or three tyre plantations and also they should establish nurseries to raise tuber crops in the water

supply catchment areas where they play an immense role in absorbing the rain water to subsurface layer.

10. In addition to Brahmagiri and Pushpagiri they should also include Kadamakal and Padinalkunad state forests as eco-sensitive zone because they are very unique in their eco system compositions. While creating elephant proof barriers they should take care to facilitate for smooth flow of rain water to down stream areas so that the streams in down valleys which are vital for wild life during summer months. Therefore, while constructing the barriers they should take care to facilitate stream flow of water to the down stream valleys.

11. Adalath appreciates the efforts taken to improve the habitat of masher fish. The question of river quality water should not be the criteria and it is the toxicity level and its bio accumulation should be carefully monitored to safeguard the aquatic fauna and flora. They should monitor and indicate the bio magnification and bio accumulation levels of the fish and aquatic life in the area instead of assuming it is safe for fish etc will not be sufficient.

12. The big estate owners like TATAs, Kotharis and others should adopt extra practices and enforce precautionary principles

to maintain safe discharge of water from their estates to the river body by reducing consumption of pesticides. The coffee quality in international is being questioned due to the presence of pesticides. Therefore, all the major players should adopt a strategy to reduce consumption of herbicides and fungicides etc. They should also adopt practices to discharge effluents after quality treatment to the liquid effluents.

13. The Deputy Conservator of Forest, Nagarahole, Wild life should pay attention regarding agitation launched by the public about laying of transmission line and they should examine alternate proposals and if need be they should insist to lay underground cables instead of clearing the forest which is much more valuable. Spending little extra money for laying underground cable in rich forest area and wild life sanctuaries and national parks is found to be very essential in preserving the vegetation and also to safeguard the habitat for wild life, tiger and various other animals.

#### **CHAMARAJANAGAR DISTRICT:**

The Deputy Commissioner has filed an affidavit stating that ULBs are collecting waste from door to door etc. and also gram

panchayaths. He is directed to convert this waste into a resource involving the poura karmikas, self help groups, rag pickers, waste dealers and generate revenue instead of dumping them in the landfill site. He and his team of local body authorities and grampanchayat officials should launch zero waste villages and panchayaths especially plastic free district. We have discussed about the Madeshwara Betta and several other temples where the waste is generated and especially plastic are discarded. The temples like Madeshwara Malai earns substantial income and a portion of it should be utilized for sanitation, hygiene and waste management to prevent spread of chronic diseases. Of late, many diseases like dengue, bird flu, swine flu, and other resistant deadly diseases like multi-drug resistant TB etc are reentering. In temples the density of the population moves very closely and the diseases like multi-drug resistant TB and virus diseases can spread. But once they disburse they cannot make out the source of contamination.

2. They should also consult the DHO and other experts to organize a systematic fumigation within and outside the temple premises which mitigate the spread of air borne viruses and other pathogens. The Deputy Commissioner, should organize a training

programme to the temple authorities and engage required number of personnel to maintain the cleanliness and hygiene of the locality. They should regularly use the antiseptic materials at suitable places and pay maximum attention to maintain the toilets, drinking water facilities etc. The Deputy Commissioner, Chamarajnagar should issue necessary notification of levying suitable fine for the people who are unauthorisedly dumping animal and poultry waste and other wastes in and around the temples located in and around the river cauvery and other sacred places. Animal slaughter, poultry wastes have been discarded in an unorganized manner. They should organize and arrange a scientific method of collection of all kinds of wastes like blood waste, food waste, animal slaughter waste etc. and make arrangement to transport to a safe place and dispose scientifically failing which the pathogens will invade and develop their own safe habitat and will become a source of spreading all kinds of diseases. Of late, the chicken waste which contains resistant antibiotics will multiply and cause serious resistant diseases. Therefore, they should insist the devotees and levy a cess for maintaining the cleanliness and hygiene of the temples by engaging required number of attenders. The Environmental Engineers and sanitary inspectors should be

involved in educating the temple staff and also the employees of endowment dept. to enforce the waste management rules and regulations. They should eliminate plastic and other hazardous waste dumping.

3. The Deputy Commissioner has reported that the unauthorized health care centers are still functioning without authorization and they should take action to issue closure orders for all such unauthorized health care centers. The Deputy Commissioner has made good progress about eviction of encroachments, tanks, river banks, water bodies etc. He should pursue this vigorously and evict all such encroachments and declare them as eco sensitive zones.

4. The authorized river sand mining management plans needs greater attention to restore the physical and biological systems at the cost of the contractors. The mines and geology dept., fisheries dept., forest dept. and ZP engineers to jointly re form the physically disturbed river banks to prevent disasters. The safety of the river should be the priority.

5. The Deputy Commissioner has mentioned about the restoration of tanks but not indicated the quantity of the water stored in them.

6. In Chamarajnagar district the villages situated on the forest boundaries should be identified and the gokattas found in government common lands, waste lands should be restored on priority so that the wild animals should confine to the government common lands in reserve forest areas for water during summer months. The district administration should prepare a comprehensive plan to create water holds in the forest area and in the common government and waste lands adjacent to game sanctuaries and forest lands. They should also create maximum extent of wet lands along with water waste to ensure fodder security during pinch season. The wet lands play a very vital role in catering the fodder and water to the elephants, tigers also in addition to other fauna in the sanctuary. They should utilize maximum NREG funds to restore gokattas, kalyanis, wet lands, ponds and percolation tanks at appropriate places so that the rain water should be harnessed to create productive hydric zones of wet lands which are most essential components in wild life management.

7. The Deputy Commissioner has mentioned that they have cognizance of Art.243(w) and addressed all the activities listed in Schedule XII of the Constitution. He should indicate the

panchayath wise achievements briefly. The EOs and the village panchayath officers should be directed to prepare a brief scenario of enforcing the constitutional obligations of Art. 243(w) and they should also form the ward committees and organized grama sabhas both for children and also for responsible citizens and elicit their suggestions and implement the waste management and reuse strategies to generate revenue in all the local bodies. They should train the waste recyclable vendors and connect poura karmikas to the waste dealers so that both the agencies should get benefit. The Adalath appreciates the efforts made to identify the vendors and they should be given training so that they should segregate, process and pack it scientifically without causing any health hazard to the neighborhood.

8. The result of conducting makkala sabhas should be highlighted and indicate the needs of the children attended. The CEO should highlight the observations made by children while conducting makkala grama sabhas.

9. Malai Mahadeshwara Temple, Gopalaswamy temple, BR Hills are the pride places of the district. Therefore, the Gram Panchayaths and local bodies should be trained to maintain the hygiene and cleanliness. All the temples are situated in the midst of

the forest, therefore, any waste especially plastic and other hazardous waste will inflict all kinds of diseases to the wild animals and also get into the food web which will cause health hazards to the endangered species also. The tribal communities should be involved under NREG funds to maintain the hygiene of all the sacred places.

10. Regarding quarrying the Deputy Commissioner should take immediate action to ban mining activities as per the directions of the Hon'ble Supreme court.

11. The Deputy Conservator of Forest, Cauvery sanctuary and Deputy Conservator of Forest, Kollegal have taken action to construct solar sheds and fences to protect the agricultural fields which is a sensible step to reduce man and animal conflict. They should continue all the efforts to buildup the confidence and seek cooperation from the general public and adjacent villages.

12. The Senior Assistant Director, Fisheries has stated in para 4 that they are considering to give a lease to Wild Association Of South India from Shivanasamudra upto Kollegal bridge. They should take adequate precautions enforcing rigid regulation and lease conditions so that they should not indulge in power exploitation and other activities in the sensitive zone. The

department should display their duties and responsibilities and should inform the panchayaths and talukas authorities and local bodies about the lease conditions and the responsibilities so that in case of any violation they should take necessary action and report.

13. The Environmental Engineer, CNNL and others working in CNNL should prepare a comprehensive plan of all the percolation tanks, wet lands and status of the cauvery river flood banks etc as explained in the general instructions and submit a detailed report about taking steps to prevent flash floods in vulnerable areas.

14. The CADA, Asst. Director of Agriculture has mentioned about treating of 1584 ha but he should ensure that they should see that farmers should adopt a safe agricultural method, failing which the treated area would become useless after incurring such huge expenditure. He should indicate the practices to be adopted after reclamation and they should take an undertaking from the farmers after treating the land to adopt safe agriculture practices.

15. The Tribal Welfare Officer has issued pattas to individuals and also to community rights and he should prepare an action plan to generate meaningful livelihood from the holdings given to them. They should consult the forest authorities and prepare a

comprehensive agri-silvi, animal friendly practices for both individual and community rights lease areas and also they should connect to lamp sites and use all other benefits to improve their livelihood conditions.

16. The Deputy Director, mines and geology should exercise utmost care while granting the permissions and they should invariably get the consent from the concerned departments like forest for quarrying, fisheries for sand mining and also the restoration and rejuvenation practices should be strictly enforced. Any major intervention in the water supply catchment areas and major disturbance of blasting etc. will have very serious implication on wild life and on aquatic life of river body. Therefore, utmost care to be exercised at all stages to prevent ecological disasters as explained in the general instructions.

17. The Deputy Director of Sericulture should consult the Central Silk Board to dispose all kinds of sericulture waste generated from sericulture activities. He should prepare an action plan of waste disposal mechanisms and to convert waste into a resource should be encouraged. The Watershed development officer should identify the watershed areas of Gaganchukki and Bharachukki and prepare a systematic watershed development in

degraded watershed areas in the above areas. The extent of land available is huge and it will serve not only as a water supply catchment and also a good wild life habitat and he should prepare an exclusive watershed development programme to improve the aesthetics and water inflow to the streams so that the underground flow should be enhanced to maintain the water flow both in Gaganchukki and Bharachukki. He should submit a detailed action plan in consultation with forest, revenue and other stake holders. The landscape should possess the indigenous vegetation composition to reflect the glory of karnataka forest and it should serve a purpose of catering the wild life during pinch season. They should take adequate precaution to form new gokattas and restore all old gokattas, percolation tanks, wetlands and water supply catchment areas.

18. The Deputy Conservator of Forest, Kollegal to take action to prevent trapping of water force in the agricultural paddy fields and also in the wet lands in and around command areas.

### **CHIKMAGALORE DISTRICT.**

The Deputy Commissioner in his introduction note of the affidavit mentioned about the salient features of analysis of ground water research strategies in the District. The copy of the strategies

evolved should be circulated to other districts so that they too can think of applying the strategies evolved by this District.

2. According to the information furnished the recuperation test indicate 10 to 38 lpm/m/dd is being assessed and they have classified distinct zones i.e. coastal, plane, southern plateau, hill region, southern transition zone etc. This is very valuable information to evolve appropriate strategy to improve the quality of the ground water in the District. The Deputy Commissioner and his team should pursue this and furnish the details of the strategies evolved and the results thereby. They also have prepared a watershed perspective map indicating the clear geomorphological profiles basing on that the site specific watershed innovation technologies to be adopted. This is what required to harness rain water and to improve the quality of the drinking water in the critical zones. They have clearly indicated geomorphological features and ground water scenario furnishing all geographical information etc. We appreciate the efforts made and every district should prepare village panchayathwise such salient information for planning of land, water and crops.

3. The Deputy Commissioner and his team should furnish the strategies and the results if possible grama panchayathi wise

and also they should motivate the communities to utilize the resource carefully and evolve safe cropping patterns especially in the rain fed areas.

4. The Deputy Commissioner, has furnished the details of the local bodies but he is directed to evolve strategies to make every town and village free from plastic and recyclable and decomposable waste. The wastes are resource where the local bodies can generate revenue by involving poura karmikas and other communities. They should adopt appropriate strategies to convert the wastes into resource.

5. Some of the TMCs are engaging from NGOs. Their services should be utilized to convert wet waste into decomposable waste and to generate revenue from methane gas and from the compost. They should also connect the waste dealers and the waste dealers should also be trained to handle the waste scientifically and to earn more profit and to share this profit to the poura karmikas, waste dealers, NGOs etc. In many local bodies the UGD and STPs are in progress. They should ensure that every local body should have functional UGDs and functional STPs and the treated water should be recycled profitably for various non-potable purposes and they should generate revenue from the treated water and convert

the sludge into manure so that every STP can be partially sustainable to maintain.

6. The Environmental Officer has filed an affidavit stating they identified 1195 coffee pulping units and inform them to adhere to the directions issued by Ministry of Environment and Forest notification dated 6.8.2008. Out of them only 56 planters dry pulping system and others are still continuing the de-pulping system by using water and they are discharging the treated effluent to lined lagoons or katcha pits. According to the statement all the 151 is having lined lagoons. Still 1044 is discharging to the katcha pits which means they will contaminate underground water and also the streams and streamlets of the rivers flowing from the coffee zone.

7. The above statement of discharging the untreated effluent to katcha pits clearly reflects that the Pollution Control Board is yet to gain hold on the situation of discharging untreated effluents to Hemavathy, Tunga, Bhadra etc. The efforts made to educate the coffee planters that coffee effluent is a rich organic matter with high BOD and COD etc. It will release the nutrients etc where the experts have given suitable protocol which will benefit the planters. They should convince the coffee board and the planters to adopt

the recommended protocols and enforce within a time frame. The Pollution Control Board officers should assess the water flow right from the origin of Gangamoola so that the quality of the inflow from mine dumps and the sludge lakes etc to be regulated carefully. The silt ponds found are getting silted up and the red blood water continues to flow from the disturbed landscape and from the dump sites and silt ponds. The Pollution Control Board should insist to stabilize and to take up intensive restoration programmes by planting indigenous grasses and plant species at the cost of the polluters. The quality of the water flowing contains iron filings which the local community is experiencing and if it is used is affecting their agricultural crops. The Pollution Control Board seems to be quite unconcerned about the problems encountered by the communities living in and around Kudremukha.

8. The District Health Officer has furnished the list of positive cases of TB and precautions taken of which 21 cases are found to be MDR which needs careful surveillance.

9. The CEO, ZP is directed to motivate every panchayath to make their panchayath free from garbage and plastic and give suitable incentives to the Gram Panchayaths which are aiming to eliminate plastic and garbage free from their panchayath

jurisdiction. Regarding all other things about toilets they are directed to go through the general directions and submit the progress achieved. They should pay to organize children gram sabhas to elicit information about the problems encountered by the school children which includes the maintenance of toilets etc.

10. The CEO has mentioned in affidavit para 7 about identifying the rivers and construction of soak pits/percolation pits etc. It is not advisable to go in for soak pits/percolation pits instead they should organize to establish a suitable wet lands to treat the domestic sewage. If need be they should consult Dr.Sreenivasa Murthy of GKVK and his colleagues to design a suitable wet land so that the organic waste generated can be converted into a fodder and other valuable biomass and the treated water can be let into the rivers. The ZP Engineers and the Environmental Engineers should be directed to prepare a sound wet land on either side of the river banks where the village sewage water is entering the rivers. The Environmental Engineers should be directed to design and implement the wet lands on priority to prevent contamination of the river water. The CEO should give a time frame to design suitable wet lands for all the rivers flowing in the district so that pollution of river bodies can be mitigated.

11. The Deputy Director of Horticulture has been directed to trace back the Chikmagalur variety of orange and also other spices known for Chikmagalur. This district has got very rich potential to develop as a district of valuable spices and horticultural crops especially varieties of citrus species etc. The climate is suitable to evolve all kinds of exotic citrus fruits. He should take the help of horticulture experts and prepare a suitable action plan region wise to grow horticultural tree crops in dry zone. He should also concentrate on the plus trees of jack in Sakkarepatna. The variety grown in Sakkarepatna is unique so he should identify the best varieties and establish a clonal orchard to maintain the genetic quality and also a clonal a plus tree orchard of Sakkarepatna variety at a suitable place.

12. The jack fruit is found to be economically profitable tree crop and its products are gaining international market. Countries like Vietnam are taking up very large scale plantations of jack trees. The products of jack fruit is being used to make ice creams and wide varieties food products like chips, pappads etc. The forest and horticulture department should jointly take up identifying the trees and encourage farmers to take production of grafted seedlings and supply other farmers at a reasonable price. They should utilize

NREG funds and motivate the small holders to plant two to five plants in their holdings even under rain fed condition will serve as insurance to earn considerable return. It is a multi purpose tree where the leaf, the fruit, the wood and every product of it is useful to the farmers. They should prepare action plan to promote horticultural crops, spices and other multi purpose tree crops specially grown in this district.

13. The efforts made by the Deputy Director to citrus crops and to introduce peaches and plums are to be scaled up and motivate farmers to take up economically viable number of plants. Places like Bangalore is getting imported fruits from all over the world and the consumers are ready to pay any price for the imported products. Therefore, the climate, soil and other diverse conditions of the district has got immense potential to grow wide varieties of horticultural crops in the district. Therefore, the CEO, Deputy Director of Horticulture, Deputy Conservator of Forests should launch a programme of promoting horticulture crops and forest tree crops in the region to increase the income of the small holders.

14. The Senior Geologist of Mines and Geology, Groundwater, ZP has furnished the details of the ground water

status in the district which indicates that it is rapidly increasing in every talukas. For instance in Kadur in 2011, 12.12 to 18.35 by 2014. This clearly indicates the efforts on watershed programme, sujala programme and also under NREG programme of protecting the watershed especially the common land and also in the private lands is found to be not effective especially in Kadur and Tarikere the decrease is very rapid. So the district administration, watershed dept, forest dept. should take this trend seriously and incorporate appropriate robust interventions to develop watershed areas in the district especially Tarikere, Kadur, N.R.pura, Chikmagalur needs attention. Even heavy rainfall area like madhugere and Sringeri is also being affected which shows that entire district needs greater attention to manage and harness the rain water. The average rainfall of the district exceeds 1500 mm which is quite abundant. Therefore the district administration should pay attention in providing sound land and water conservation and reforestation interventions by utilizing NREG funds and other funds.

15. The Forest Dept. should identify abandoned mines and river banks and degraded common lands and initiate restoration of such degraded lands by preparing intensive watershed development programmes in common lands and other land which have been

highly disturbed in the District due to mining, quarrying, sand mining, etc.

16. The forest officers should take action to declare highly fragile areas as sensitive zones and prohibit all activities like quarrying, sand mining etc.

17. The fisheries dept. should pay attention to protect the river systems to encourage and to preserve breeding habitats of the fresh water river systems. Most of the species have been severely disturbed. It requires greater attention. They are directed to submit disturbed breeding habitats and steps to be taken to restore the breeding habitats of the indigenous species. They should take adequate precautions to prevent introduction of species like cat fish and other exotics to the river systems. Before taking up introduction of such species they should take adequate measures to study their productive habitat and other repercussions on the indigenous species.

18. The Deputy Director of Horticulture has indicated lack of quality planting material from which the productivity has suffered. The Deputy Commissioner should initiate necessary steps to obtain quality planting materials from various sources. They should contact the Director and Centre Horticulture Research Bangalore to

help them to procure quality material etc. The Adalath appreciates various efforts undertaken by the Deputy Director as directed by the Adalath but he should show substantial progress of obtaining good results by involving the farming communities.

19. Recently Mudigere and round about experienced something like acid rains and red pigments in the rain water and also ash content were also observed by the people in and around Mudigere. The villagers have observed sort of burnt patches on the soil floor which clearly indicates the impact of thermal power plants situated in South Canara. In crow fly distance it will be about less than 100 kms. The emissions which are accumulated in the ambient air such SO<sub>2</sub>, Nox and fine particulate dust cumulatively generate secondary pollutants like dilute nitric acid, dilute sulphuric acid etc. This acid rain when it falls on the forest floor and on the tree canopy the eggs of the beetles, flies, butterflies etc will become leathery due to the acid shock and the larvae will find it difficult to break the egg shell and in the process the larvae may loose its legs or other organs like antennae proboscis which are most vital organs. Once they loose this organs, they will die prematurely means the pollinators population will dwindle considerably.

20. In addition to this impact on forest fauna and flora the soils in the western ghats are acidic i.e, the pH will be around 5.5 to 6.5. Therefore, the acid rains will bring in dramatic physical and chemical changes in the soil texture, structure etc and aggravates soil erosion due to loss of physical bondage of the laterite soils.

21. The most important impact will be reduction of soil carbon stocks and changes in the land cover and canopy cover will further aggravate due to loss of soil organic carbon. The soil organic carbon variation are linked to land cover change and affects the bio diversity of the western ghats. The Deputy Commissioner, the Environmental Engineers, Pollution Control Board should request the research centre stationed at Madhugiri and Agricultural University stationed at Hassan to undertake the studies in the belt of Mudigere where the three important rivers of Karnataka takes their origin. Tunga, Bhadra, Hemavathy are most important rivers which are the lifeline of Karnataka. Therefore, the Deputy Commissioner should organize a discussion with scientists of Agricultural University and scientists of Madhugiri research station. He can contact Prof. Thyagaraj of Agricultural University, Hassan to coordinate the research programme in this zone. The Pollution Control Board should meet the expenses launching this

investigation report. This is due to contribution of the emissions by thermal power plants in Udupi and Mangalore Districts.

22. The latest report published on climate change clearly says coal is the highest “killer fuel”. WHO also mentions that millions of people die prematurely every year which are directly linked to exposure to out door and indoor pollution and they clearly linked air pollution to cardio vascular disease and cancer. Therefore, the Pollution Control Board should undertake investigation of this ecologically sensitive zone impact due to emissions of thermal power plants. The Deputy Commissioner is directed to report the action taken in initiating this scientific investigation in the vital catchment area of Karnataka State.

**DAKSHINA KANNADA DISTRICT:-**

Regarding municipal waste management practices though the district has made a progress, but conversion of waste into a resource and making every local body free from plastic and waste is yet to gain strength. As discussed in the Adalath the Deputy Commissioner and the Commissioners of the local bodies should evolve appropriate strategies to convert all the waste into a resource and every town should be made free from plastic and hazardous wastes.

2. Regarding granting permission in CRZ zone should be carefully looked into because the CRZ zone is one of the very vital breeding habitats for turtle which is an endangered species. The CRZ zone provides not only a habitat for turtles and other wide range of species solely depends on the CRZ zone for breeding and to maintain the sustainable productivity. Any disturbance to this sensitive zone will have serious ecological implications on marine life and also other physical hazards of sea erosion etc. Therefore, the CRZ regulations should be strictly enforced.

3. Mangalore Corporation is collecting bulk waste from hotels and kalyan mantapas but utilization of it is equally important and it can be converted into a useful natural gas and manure and also a pigrimeal etc. They should evolve a system to utilize this waste as pigri feed and to generate natural gas and vermin compost. Mere collection alone will not serve the purpose. Transforming this waste into a revenue and product will be sustainable and corporation can realize good revenue from this resource.

4. The DHO has detected childhood TB cases and MDR TB cases. They should exercise strict vigilance of monitoring them to prevent spread of the deadly disease.

5. The district is consuming quite a quantity of insecticides, fungicides, herbicides, acaricides. They should switch over to bio pesticides produced by bio centre which is working under the control of Horticulture Dept. and also switch over to organic practices to prevent pollution marine system and aquatic system.

6. The CEO has submitted an affidavit stating that the villages living along the river courses are discharging the effluents through soak pits and not letting into the rivers and tributaries. Even the houses also discharge the toilet water into the pits. They are directed to establish wet lands instead of discharging to the soak pits. Wet land technology is a very well proved technology to treat the domestic effluent. The CEO should utilize the services of Environmental Engineers and other experts if need be to develop a suitable wet lands at all the villages and make the effluent to flow through the wet lands so that the domestic sewage can be converted into a resource by growing grasses and other useful biomass including the fresh water aquatic life. They should totally ban the system of soak pits and develop suitable wet lands to transform this waste into a product. They should consult the experts concerned and utilize the resource to generate multi purpose products by evolving suitable technology of wet lands all

along the river courses. By next adalath the Environmental Engineers should be directed to prepare innovative protocols of wet lands for every stream which is entering from the villages and towns to the river bodies. The CEO has stated that 8952 industries are located in ZP areas but their wastes has to be discharged at safe places. The industries and village panchayaths should work out a models to dispose the waste generated by them at notified areas. If the industries dump their sites, the district which receives heavy rainfall the same will get into the rivers and tributaries. Therefore, the Environmental Engineers should be directed to visit all GPs and enlist the industries and obtain the material audit from each industry and identify the mode of disposing the waste generated by them. They should furnish the mode of disposal of all the industries. The Pollution Control Board and the Environmental Engineers should inspect each and every category of the industries and enforce the precautionary principles and also indicate the risks involved in waste disposal and other activities by the industries. They should classify the category of industry and incorporate appropriate onsite and offsite management plans for each GPs depending upon the category of the industry.

7. The Deputy Conservator of Forest has filed an affidavit stating that MRPL is planting only in two acres. The area under their control is thousands of acres. They must be planting for a symbolic purpose not to accord required ecological service to the community around the factory premises. The planting in industrial area and KIADB area also seems to be very inadequate when compared to number of industries.

8. As per the law 1/3<sup>rd</sup> of the area has to be kept vacant in every industry and should be developed as a green lung space to maintain the quality of the life for inmates and to the surround habitants. The Deputy Conservator of Forest and the pollution control board and the Environmental Engineers concerned of the local body should prepare a joint action plan for every category of industries both in towns and ZPs and enforce them to earmark 1/3 of the area for tree planting programme to improve the quality of the environment in and around every industrial establishment. The Pollution Control Board should insist every industry to create a suitable green lung space in every industry and submit a detailed report about the action taken without fail.

9. The Environmental officer has submitted an affidavit explaining the reasons for all the observations. The copies of the

reports not enclosed but the cumulative impacts of all effluents discharged needs special auditing. The CEO has indicated in the affidavit more than 8000 industries located in ZP and also in the town municipalities the bio accumulation and cumulative impact of discharge of various kinds of effluents needs special audit. The Environmental Engineers of local bodies, the Environmental officer of Pollution Control Board and other concerned should make an assessment of the various impacts made on air, water and health due to bio accumulation and magnification of various effluents discharged to the rivers and to marine eco systems.

10. The various toxic substances are getting into the food chain. A regular monitoring of residual impacts of toxic substances in the fish, meat, milk and vegetables needs attention. So the Environmental Engineer and Pollution Control Board should collect samples of water and products produced in such vulnerable places and they should subject to the analysis of bio accumulation of toxic substances in the food web. The Pollution Control Board should bear the entire cost and identify the expert laboratories. The entire process of collection sending samples etc should be done in a confidential way without disclosing the sources etc. to the laboratories. They should identify accredited laboratories and send

the samples by giving a code numbers. The local body Environmental Engineers should collect the samples and send them to the laboratories and obtain results independently in addition to the samples and results obtained by officers of the Pollution Control Board so that we can cross check the results. The Environmental Engineers of local bodies should be directed to identify the most vulnerable places where they are discharging all kinds of wastes and send the products as well as the effluent samples to assess the presence of toxic substances. They should also conduct similar tests for air quality monitoring and submit a report of air quality by sending it to accredited laboratories, if need be they should summon the experts to obtain the samples randomly and confidentially. They should not disclose the source of effluents and the industries to the laboratory personnel and maintain strict confidentiality while transporting the samples to the laboratories.

11. The DHO should undertake on priority to identify Endosulphan victims and provide necessary financial and health facilities.

12. The Deputy Conservator of Forest should pay attention to produce local indigenous species like garnecias and various other

local economically important species which has got high economic value.

13. Watershed dept., National and District Highway authorities and forest authorities should identify the vulnerable localities which are causing regular land slides. Every year in this district regular land slides accidents and other hazards takes place. They should identify the most vulnerable localities and prohibit of sand mining, quarrying, deforestation etc and jointly they should prepare an action plan to protect the terrain from land slides incorporating effective reforestation and conservation activities like stabilization of the land etc. The entire district is experiencing torrential rains and the land mass is highly fragile which needs rigid protection from any kind of physical disturbance or destabilization. Therefore, the watershed, forest depts. ZP engineers concerned, Environmental Engineers concerned, national and district highway authorities should prepare their own action plans for district, state and national highways and consult the concerned dept. and prepare comprehensive action plan to stabilize all vulnerable disasters.

**HASSAN DISTRICT**

1. The Deputy Commissioner is directed to motivate the Commissioners and the CEO, grampanchayaths, to take up conversion organic waste in to compost and recyclable waste into revenue yielding activity. He should connect the waste dealers segregation and involve the pouira karmikas and self help groups to segregate and generate income from the recyclable wastes as discussed in the adalath. He should submit the details of achievements of all local bodies in the next adalath.

2. The Deputy Commissioner has mentioned about restoration of lakes but he is silent about eviction of encroachments. He should submit a detail report about the progress achieved in this regard.

3. The Deputy Commissioner has mentioned about using biological micro organisms culture to the convert the market and hotel waste. He is directed to instruct his Environmental Engineer to prepare the efficacy of the biological organism to convert market and hotel waste. He should also direct the Environmental Engineer to use the same material to convert organic waste collected from the residents into a compost and vermi compost. Elected

representative Sri Suresh Kumar, Hassan CMC has appeared and made submission that what has been stated in the affidavits are all false. Further he stated that there is no waste collection method and there is no public land filling site and unscientifically it is utilized. Further he stated that though there is waterman shed but there is no electricity, power, windows, doors etc. Only poles are but no power. In this regard the Deputy Commissioner is directed to file statement with regard to the submission made by Sri Suresh and filed affidavit within two months and a copy to be supplied to Sri Suresh Commissioner. The Deputy Commissioner should investigate the irregularities committed by the officials. Some of the NGOs also have complained about harassment and irregularities committed by the local bodies. He should submit a report on all the irregularities and take necessary action against the defaulters.

4. In Hassan town few very old tanks have been diverted for other activities by reclaiming the water bodies. The Deputy Commissioner should identify all such water bodies and take action as per the directions of the Supreme Court to demolish all such constructions and restore the water bodies.

5. The suggestion of the Deputy Commissioner to convert private wet lands into wet land to serve the purpose of treating the sewage is a good suggestion but he should convince the land owners and develop much more profitable productive wet land as an asset to the farmers and simultaneously the domestic effluent will get automatically treated and better quality of the water can be discharged to the rivers. The organic matter entering the wet land will become a useful resource to produce vegetables, fish and various other crops. But it requires a scientific design to avert adverse impact. The Deputy Commissioner should consult the agricultural university stationed at Hassan to visit such locations and to design a scientific wet land so that the sewage water which is entering the river can be utilized profitably by transforming the lands under the control of the individuals and also the government lands into a fodder, horticulture or fresh water aquatic ponds etc. The Deputy Commissioner should invite the scientists of the university and give them an assignment to design wet lands in all the GPs and also in the Town Panchayaths so that the treatment of the sewage water generated by the communities can be transformed into a resource. He is directed to contact Sri Thyagaraj, Principle and other scientists who seem to be quite

enthusiastic in this process. He should make use of their services and give them an assignment, if need be, the Pollution Control Board should also contribute to develop a suitable wet lands to prevent river pollution and to convert the domestic waste into a resource. He is directed to prepare a project in consultation with the scientist and initiate steps to improve the quality of the water which is entering the river body.

6. The DHO has detected has 44 confirmed MDR cases. He should take extra precaution to spread of the disease from the identified patients and also they should take up investigation of detection of infant TB.

7. The Environmental officer of Pollution Control Board has stated that M/s.Nandihally clay mines of MML are generating the effluent and recycling the water with the help of settling tanks. The sludge is being disposed to outside parties. They should investigate how this material is being used without causing any hazard at the consumer end. They should obtain information from the buyers about the mode of consuming and using this material. The statement of no generation of waste sludge is not acceptable until they study and submit a complete loop of waste recycling process.

The partial statements will not serve the purpose of managing the waste materials. It may not cause problem on site but it cause some problems or the other at the other end. Therefore the Pollution Control Board is directed how this sludge is being used and precautions taken etc should be reported. He has also mentioned that the sand segregated is being used to refill the underground mines. He should study the impact of it on restoring the mine pits. They should take adequate precautions to restore the entire mine pit to its original form so that it should become a productive land. The MML authorities should be directed to restore all the mine pits and re form by incorporating necessary ingredients to form a productive land asset. He should also reform all land fill sites with suitable vegetation. The Environmental officer should contact the forest officer who is serving in MML as a technical adviser to restore and rejuvenate all the mine dumps, mine pits scientifically. He should the report area disturbed and area rejuvenated and the other precautions taken to prevent soil erosion, air pollution etc. He also mention that MML authorities are providing check dams to collect the silt etc. They should restore the landscape and undertake reforestation by reforming landscape to its original shape.

8. The CEO has organized the children grama sabha but he has not mentioned the feed back given by children about their short comings in their schools and also in the grampanchayaths. Especially the toilets, library and various other basic facilities has been provided to the children. They should be taught about civic responsibilities and sanitation in their grama panchayaths. They should become ambassadors to the elders to improve the quality of the life in every grama panchayaths. They should give ample opportunity to children to express their grievances boldly so that the teachers and also the grama panchayathy members should become accountable to the children also.

9. Regarding encroachments of Kaval lands he should submit a detailed report and take action against the encroachers and direct to the animal husbandary dept. to use NREG funds to develop all kaval lands as pasture lands. The Dept. should use the services of agricultural university stationed at Hassan to develop silvi-pasture lands, gokattas and kalyanis at suitable places in the kaval lands. They should involve the local panchayaths in management and sharing the resources of kaval lands. As per the Supreme Court direction they need not wait for legal action and

they should take eviction as directed by the Supreme Court in all gomalas and kaval lands. They should submit a detailed action plan of converting this useful asset for the benefit of the community involving the GPs and experts to generate the fodder, tree fodder etc. They should also develop technology to convert the fodder into silage so that to use during summer months within the kaval areas when the grass is highly nutritious and palatable.

10. The Agriculture Dept. is consuming over a lakh liter of weedicides, fungicides and other chemicals. They should switch over to other eco friendly practices. Whatever the weeds are found to highly medicinal plants and they have their own role in maintaining the ecological integrity. Elimination of weeds will reduce the food web to the benign insects especially bees, beetles etc who play a very important role in increasing the productivity. The Joint Director of Agriculture has stated that survey of organo phosphorus compounds residues in human blood has not been conducted. He is directed to contact health dept. and medical college students and their services should be used to conduct the survey. They should organize systematic camps to analyse the blood samples to detect the chemical residues which will cause

wide range of cancers. Early detection of cancer and chemicals will go in a long way to prevent deadly diseases like cancer.

11. The Executive Engineer, MI have taken action to evict encroachments in 277 tanks out of 2773 tanks. Action taken appears to be not very satisfactory he should take the help of Deputy Commissioner, Asst. Commissioner and Tahsildar and launch a programme of evicting encroachment of raja kaluveys etc and restoration work on priority.

12. Regarding ZP tanks the progress seems to be not satisfactory and the ZP engineers should take this on priority and take action against the encroachers of gokattas, kalyanis and percolation tanks.

13. The District Authorities have taken up to create elephant corridor and they should submit progress achieved in establishing the elephant corridor in the district.

14. Hassan Cooperative Milk Producers' Society is increasing their production without commissioning the effluent treatment plant. The Deputy Commissioner should insist to commission the ETP before increasing the production. The effluent generated

should be treated and after treatment the treated water should be profitably utilized for non-potable purposes or for irrigation.

15. The Joint Director of Agriculture has mentioned that they are consuming 2 lakh metric tones of fertilizers. They should launch a programme to switch over to organic farming practices because of the discharge of unutilized nutrients to water bodies will lead to eutrofication and aquatic weeds will invade the water bodies.

### **UDUPI DISTRICT**

The Deputy Commissioner is directed to motivate all the Commissioners and CEO to make the district free from plastic and also direct them to convert bio degradable waste into compost and vermi compost and non-degradable waste into recyclable waste and to earn profit by converting all this waste into a resource. The District is having number of Temples, hospitals and other commercial centers. The Deputy Commissioner should insist the private education institutes, hospitals, temple authorities, hostels and also commercial centers to segregate and to deliver the segregated material to the local bodies. If possible, they themselves should commission suitable digesters to convert bio degradable

waste into a natural gas which can be used even at micro and macro scale by all organizations which help them in a big way to reduce their cost of fuel. They can also convert this sludge generated into a compost/vermi compost. He should launch incentive so that the burden on the local bodies will come down considerably. All temple authorities are generating income and a portion of it should be utilized for sanitation and the Deputy Commissioner enforce that none of the temple authorities should encourage to use plastic in the temple surroundings. Maintenance of toilets and sanitation in and around temple is very essential. Regular fumigation and use of anti septic solutions should be made mandatory in all the temples. Of late all kinds of diseases like Dengue, Ebola are crossing international boundaries and number of foreign visitors are coming to Udupi and chances of spread of these diseases is quite high in the temples where congregation is high. Also the diseases like MDR TB, is also increasing and it may spread the disease. Therefore, the Deputy Commissioner is directed to enforce sanitation and other measures to prevent the spread of the disease. The DHO and the local Health Inspectors should be made responsible to maintain sanitation in the temples, beach etc.

2. UGD and STPs in Udupi, Kundapur and other towns is in progress. The Deputy Commissioner should ensure the utilization of treated water for the benefit of the community and the municipality should generate some revenue by using the treated water.

3. The Foreign visitors and other local visitors who are using the beaches are throwing all kinds of waste materials including the plastic which is very hazardous to the marine life. They should action to prohibit use of plastics in the beaches and they should display the prohibitory orders in all the beaches. They should levy heavy fine for the people who are discarding the plastic waste in the beaches. They should engage few pouira karmikas to move frequently or regularly and to collect all the plastic and to prevent discarding of plastic in the beaches and also in the water bodies.

4. The estuaries (where river join the ocean) is a most critical habitat providing a niche for breeding of all kinds of marine animals and also provides a habitat for mangrove. The chances of entering plastic in the estuaries is very high which affect the breeding habitat. In all the estuaries the concerned authorities should engage pouira karmikas or personnel under NREG funds to

collect the plastic materials so that the breeding habitat hygiene and sanitation should be maintained failing which the adults who enter the niche will lay their eggs in the estuaries. The plastic which is entering will alter the physical nature of the water body and also engulfs the eggs, which prevents direct exposure to sun and air. Therefore, the plastic which is entering the estuaries will cause grievous injury to the productivity of marine life. So cleaning and maintenance of estuaries both in Mangalore and Udupi is very vital. The Municipal Commissioners, the Deputy Conservator of Forests and other concerned authorities should enforce that the visitors should not discard any kind of hazardous materials including the plastic in the beaches and also in the estuaries. They should engage if need be required number of personnel to clean and maintain the hygiene by collecting plastic and hazardous materials.

5. The Deputy Commissioner is directed to identify a suitable locality to establish a marine park. He should contact the fisheries college and direct them to identify a locality to create a marine park so that the marine breeding habitat should be maintained and also it can become a tourist spot.

6. The DHO and District Surgeon have to take up intensive servi camp to detect the victims of Endosulphan and to provide necessary medical and other facilities to the victims as directed the Karnataka High Court. The Deputy Commissioner should also direct all village panchayaths chairman and the PDOs to report the victims found in the interior places also.

7. The Asst. Executive Engineer, Sea Erosion Prevention Sub-Division, Udupi should identify the vulnerable areas and request the forest authorities to take up planting of mangrove or casurina and other local vegetation to prevent sea erosion and to serve as a buffer to prevent the impact of Tsunami like events. The vegetation will play vital role in mitigating the damages due to Tsunami like events.

8. Due to climate change and increase of sea levels will increase the impacts in future. Therefore, the identification of most vulnerable areas and taking adequate precautions by implanting biological structures like mangrove etc will go in a long way to prevent destructive menace due to natural catastrophes.

9. The Deputy Conservator of Forests is directed to visit Shankara Peetha and other regions in and around Mookambika

temple. Shankara Peetha is a heritage center which is located in the middle of the forest. The deforestation and disturbance is causing enormous damage in the highly fragile eco systems on the hill ranges of Kundapur round about. The species like acacia catechu is being over exploited and their population has reached to very low density. Intensive reforestation of original vegetation of growing stock is very vital to maintain the river flow and to prevent siltation in the sea. The estuaries should be developed and required composition of mangrove ecological zones should be structured so that the estuaries will provide a habitat for marine animals to come and breed and also serve as a green barricade to mitigate the catastrophic events induced by sea erosion. The Deputy Conservator of Forest should identify all estuaries and declare as ecological sensitive zones and seek funds to develop mangrove vegetation from NREG and other funds. Reforestation of surroundings of Shankara Peetha and declaring it as a heritage area is essential. The Deputy Commissioner, Deputy Conservator of Forest should take action to declare atleast 500 to 1000 ha around Shankarpeetha as heritage area and rejuvenate natural forest which inspired Sri Sri Shankaracharya to compose Soundarya Lahiri which means the beauty of the nature.

Therefore, this center should become a place to see the glory of the western ghat vegetation. The Deputy Conservator of Forest should prepare a master plan in the honor of the great Philosopher Sri Shankara. They should prohibit all kinds of activities of road forming, mining, cutting of trees etc. It should be declared as a sanctum sanctorium and prohibit all other activities except enjoying the serenity of the nature. They should rejuvenate all tributaries and streams so that the natural streams should produce a music rhythm of water flow etc.

Next Adalat will be held on **07<sup>th</sup> MARCH 2015.**

**Sd/-  
JUDGE**

**Sd/-  
MEMBER**