

S U P R E M E C O U R T O F I N D I A
RECORD OF PROCEEDINGS

Petition(s) for Special Leave to Appeal (Civil) No(s).17062/2010

(From the judgement and order dated 08/04/2010 in
of The HIGH COURT OF MADRAS)

RA No. 33/2010

KANYAKUMARI DIST.LOTUS.FLOW.P&C.WELF.STY
VERSUS
R.S.LAL MOHAN & ORS.

Petitioner(s)

Respondent(s)

(With prayer for interim relief)

Date: 09/07/2010 This Petition was called on for hearing today.

CORAM :

HON'BLE MR. JUSTICE G.S. SINGHVI
HON'BLE MR. JUSTICE ASOK KUMAR GANGULY

For Petitioner(s) Mr. M. Kalyanasundaram, Sr. Adv.
Mr. S.R. Sharma, Adv.
Mr. S. Balaji, Adv.
Ms. Madhusmita Bora, Adv.
Mr. S. Srinivasan, Adv.

For Respondent(s)

UPON hearing counsel the Court made the following
O R D E R

This petition is directed against order dated
8.4.2010 passed by the Division Bench of Madurai Bench
of Madras High Court declining the petitioner's prayer
for review of order dated 12.11.2009 passed in Writ
Petition (MD) No. 2799 of 2007 - Dr. R.S. Lal Mohan and
others v. The Executive Engineer (WRO), Public Works
Department, Kanyakumari District.

A perusal of the record shows that the petition
filed by the private respondents in the form of public
interest litigation for restraining the official
respondents from leasing out the tanks for cultivation
of lotus plants to private individuals was allowed by
the Division Bench of the High Court after taking

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cognizance of the environmental hazards caused due to
commercial use of water bodies. Paragraphs 6, 7, 9, 10
and 11 of order dated 12.11.2009 in which the Division
Bench of the High Court made detailed elucidation of
various harmful consequences of the use of water bodies
for lotus cultivation, read thus:

"6. In spite of the above significance of the lotus
plant, certain impact on soil/surface, water and
air pollutions caused due to the commercial growth
of the plant in tanks has received the attention of
activists concerned with the conservation of
environment. The grievance of the petitioners is to
be considered with reference to such impacts on
environment. A scientific study on such impacts
would reveal the following. As far as the
soil/surface pollution is concerned, the luxurious
growth of lotus leaves used to clog the ponds and

the evaporation was directly proportional to the surface area. The thick growth of lotus in ponds will increase evaporation and transpiration of the water faster and dry up the ponds. The lotus leaves prevent the sunrays from falling on the bottom of the ponds, the decomposition of the debris increases and enhances the production of hydrogen sulphate and carbon-di-oxide. The surface plants are rooted in the bottom of the pond and their leaves and floral shoots rise above the water level. So they prefer the shallow parts and shores of ponds. Almost without exception, surface flora are undesirable and should be kept down because they (i) lead to silting up of ponds, (ii) cut off light and reduce production; oxygen also is reduced, (iii) obstruct feeding of fish, (iv) deprive the pond of plankton and instead work it into non-decomposable cellulose, (v) make the pond unproductive, by extensive penetration of the bottom by the roots, (vi) make pond management more difficult. Soil or surface pollution is mostly attributed to mushroom planting of weeds in ponds. Weeds are plants that are "out of place" and whose potentialities for harm are greater than for good; they are not so noxious as they are undesirable. Actually, weeds are greatly responsible for ineffective utilisation of waters and for the reduced productivity of inland waters. Weeds (i) utilise most of the nutrients, (ii) cause carbon-di-oxide accumulation, (iii) cause formation of hydrogen sulphide, methane and other toxic gases,

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(iv) lead to swamp formation, (v) lead to oxygen depletion, (vi) algal blooms choke gills, or rot and spoil the water.

7. So far as the water pollution is concerned, the presence of aquatic weeds result in eutrophication of wet lands. It also hinders free flow of water in canal and causes damage to irrigation structures. When the tank is full of lotus leaves, stems and roots die and disintegrate after about three months. The decayed and decaying plant matters of the organic debris render the water foul and colour of the water itself changes to brown. This coloured water having high organic content promotes further growth of the weeds as the water have nutrient value and the aquatic weeds thrive on nutrient water. Eutrophication is one of the major water quality problem affecting tanks. The accumulation of excess nutrients in tanks result in excessive algae and aquatic weed growth and the area becomes swamped with algae and foreign species starving the water body of precious oxygen essential for the survival of aquatic animal life. When the water body is rich in oxygen and has only a few nutrients, sunlight can penetrate deep and many aquatic animals thrive. This is the condition when the water is clear, healthy and is free from excessive nutrients. Cultivation of lotus plants paves way for the growth of other aquatic weeds and it is a breeding ground for mosquito and other insects. The cultivation of lotus alters the colour and taste of water bodies and it renders the water unfit for consumption. Recreation like bathing, swimming and sight-seeing are at stake in weedy water bodies and it causes irritation and skin diseases. Floating plants float upon the surface

and are rooted in the water and not in the bottom of the pond. They are found in profusion only in wind protected ponds (small tree-lined ponds), rich in foodstuffs. They shade the pond and so are harmful. Submerged ponds or weeds grow chiefly under the water surface. They are (i) the natural food of many aquatics, (ii) ideal haunts of vegetation fauna, (iii) the source for organic slime at the bottom, (iv) fertilizers of the pond when decayed, (v) suppliers of oxygen. So they are not harmful, in limited quantities; but in excess they are noxious, as they (i) shade the pond and (ii) lead to either super-saturation, or depletion of oxygen. Surface plants like the noxious Water-hyacinth (*Eichornia*) and *Pistia* choke up the water-surface. The duck-weeds, *Lemna* and *Azolla* form

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green mats on the water-surface. The smaller duck-weed, *Wolfia*, is small, green and grain-like. All these often form a complete screen and cut-off sunlight and atmospheric gases. *Nymphaea* (*Lotus*) and *Nelumbium* are firmly rooted in the bottom, but their leaves float on the surface. They often grow in such profusion as to choke the pond and reduce its productivity. Profuse weeds cause wide fluctuations in hydro-logical conditions. During growth there are few detrimental effects, because the dissolved oxygen concentration is increased and inorganic nutrients are absorbed from water. At the end of the growing season, or when the weeds are killed, their decomposition may exert heavy demands on the oxygen resources of a water. In addition, large quantities of nutrients may be released from this decaying mass.

9. So far as the air pollution is concerned, when the tank is full of lotus leaves, stems and roots die and disintegrate after about three months and as a result of the decayed and decaying plant matters, apart from the change in the colour of water to brown colour due to the organic debris, bad odour and foul smell emanates from such ponds which affects the environment including human beings. Due to the excessive algae and weed growth, precious oxygen essential for the survival of aquatic animal life is also lost. The stagnant organic rich water caused by the cultivation of lotus leaves and other weeds also indirectly contribute for the diseases like malaria, filaria, chikungunya, dengue and other viral diseases.

10. Above all, as has been pointed out by the petitioners, Kanyakumari district had nearly 3500 tanks in the year 1962 and in the year 1998, the tanks were reduced to 2447. The district has lost almost 1000 tanks in between. One of the main causes for degradation of tanks is due to the infestation of tanks by aquatic weeds, gradually leading to encroachment. The cultivation of lotus plants has resulted in siltation of the tanks to a large extent when the lotus leaves along with other weeds grow and choke the pond and the depth of the pond decreases when the leaves die, disintegrate and settle down in the bottom. When the dead organic debris settle on the tank bed, it reduces the holding capacity of the tank. The petitioners allegations in this regard have not been denied.

11. The above discussion would go to show that if

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the lotus plants are grown on commercial basis and that too, by leasing out the tanks for their cultivation, the result would be disastrous and it is obvious. The above facts would show that when commercial cultivation of lotus in ponds is allowed, such ponds could be characterized by very poor water quality, with high nutrient loading as well as very high faecal coliform counts. Lakes and ponds will suffer from environmental effects of increased population of lotus cultivation. The surface area of the lake shrinks within memory. The silt fills up the lake, the nutrients encourages the growth of weed and algae. The practice of farming on floating beds also encroaches into the diminishing area of the lakes/ponds, resulting in such floating beds becoming solid grounds. While considering the significance and importance of lotus flower, when it is grown on commercial basis, the impact on pollution is greater and cannot be ignored. The petitioners have made a representation to the Executive Engineer (WRO), Public Works Department, Kanyakumari district on 7.3.2007 bringing to his notice the ill-effects of leasing out of the tanks for cultivation of lotus plants. As no action was taken, they have also approached the District Collector with a representation on 8.3.2007. These representations were also not considered. In these circumstances, they have approached this Court by way of the present writ petition. In our opinion and for the reasons which we have mentioned earlier, we find every justification in the grievance of the petitioners. The protection of tanks is of paramount importance, as the water stored in those tanks shall cater to the needs of the public for drinking as well as for cultivation purpose. It is the specific grievance of the petitioners that agriculture in Kanyakumari district is depending upon the water supply from the storage tanks only. The large scale growing and cultivation of lotus plants in the tanks which are leased out to individuals, has resulted in soil/surface, water and air pollutions. It is right time that the official respondents should be restrained from leasing out the tanks for cultivation of lotus plants. According to the petitioners, in the year 2004-2005, almost 230 tanks were leased out for lotus cultivation. In the year 2007-2008, 129 further tanks were leased out. At that point of time, the petitioners have approached this Court by way of the present writ petition when further action was taken to lease out

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certain other tanks for cultivation of lotus plants."

Learned counsel for the petitioners made strenuous efforts to convince us that the private respondents did not have the locus to file public interest litigation or seek a direction against leasing out of water bodies for cultivation of lotus plants and that the High Court was not justified in choosing one district for passing the restraint order, but we have not felt impressed. Undisputedly, respondent No.1, Dr. R.S. Lal Mohan

who is the Chairman of Conservation of Nature Trust was the former Principal Scientist of Indian Council of Agriculture Research and has been striving for the protection and conservation of the environment in the district. He is also involved in major projects in and across the country for protection and preservation of the environment and ecology. Therefore, the High Court had rightly entertained the petition filed by him and others in public interest. The direction given by the High Court cannot be castigated as discriminatory because the issue raised in the writ petition filed by the private respondents was in respect of Kanyakumari district only.

We are further of the view that the petitioners, who are interested in commercial exploitation of water bodies for growing lotus plants cannot complain against the direction given by the High Court for ensuring that by growing lotus plants, the water bodies are not destroyed.

With the above observation, the special leave petition is dismissed.

(Satish K.Yadav)
Court Master

(Phoolan Wati Arora)
Court Master