

ANDHRA PRADESH

A Year of Drought?

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In the absence of a positive policy regarding rain water conservation, the 'natural' process of development destroys mechanisms of storage, retention and recharge. All of this is part of the phenomenon of 'drought', whether or not there is a monsoon failure.

THE south-west monsoon is all set to leave the skies of Andhra Pradesh. Having played truant for the first six weeks and wilful for the next six it is finally ready to clear out, leaving the people estimating—each in their region and locality—how much of a drought they are going to face in the coming year. It is no longer a new thing to say that official pronouncement of normality or subnormality of total seasonal rainfall in each of the districts is a largely meaningless exercise; and that the amount of rainfall has to be discussed in conjunction with what has happened or been done to the storage and retention mechanisms, processes and facilities to arrive at a meaningful framework for discussing drought. What needs to be stressed anew and described in gory detail again and again is that these have been destroyed, neglected, mismanaged or developed in a skewed way over the years, creating perpetual drought conditions of varied extent in various pockets, whether total precipitation of rain is normal or not. It is when rainfall drops below normal that the neglect and the one-sided development of water retention and storage processes is exposed sharply and gets discussed as drought, attributed to the meanness of the monsoon.

It is true that the government these days attributes the shortfall in rain to destruction of forests and is paying considerable attention to growing more forests, an attention that is likely to increase with growing conservationist pressure from international bodies on tropical countries that they should save their forests. Though our government understandably objects to this one-sided concern about conservancy in the third world—a one-sidedness that affects all concerns from atomic weapons to forests—which has fairly robbed the word 'international' appended to many world bodies of all meaning, this conservancy is a good thing as far as it goes, even if the emphasis on afforestation as the cure-all for drought is robbing landless poor of land that they have been in occupation of for years and even decades. Indeed afforestation is spoken of in such sacred tones by officials that the poor are left feeling guilty for even asserting their right to the land they are banished from. But the destruction of forests is about all that will be acknowledged by way of 'our sins' in causing drought. The lack of policies and wrong policies concerning water retention, storage and use is not treated as integral to the problem of drought the way deforestation is. Evidently, any such acknowledgement would amount to disturbing too many well-protected interests, many more than afforestation of land under the occupation of the poor would.

By the third week of July this year there was so little rain in Andhra Pradesh that the situation was frightening. Eighteen of the 23 districts in the state had received much less than

normal rain, in many cases as little as 15 to 20 per cent of normal. For instance, Pargi taluk of Kanga Reddy district, which has a normal precipitation of 1,600 mm by end July, had received only 330 mm by the end of the third week of July.

'PUJAS' FOR RAINS

The worried government officially commissioned 'pujas' and higher vedic rites to placate 'Varuna' the rain god. The ministry of religious endowments—which is presumably closest to the gods—was chosen to commission and get the rites executed. But in keeping with the present emphasis on private effort, ministers advised people not to depend for everything on the government but to perform 'pujas' on their own. There is no dearth of brahmins in the country anyway. Simultaneously, however, the government prudently undertook cloud-seeding experiments at chosen localities to cajole the clouds by secular effort to unburden themselves of water. And to confound things further there was a low pressure simultaneously in the Bay of Bengal, usually an augury of rain on the eastern coast. It requires statistical analysis of the kind not yet invented to decide which of these causes resulted in the tangible effect, but some effect did result. Meteorologists of Andhra University rebuked the cloud-seeding experts who had come from Gujarat for prematurely patting themselves on the back, and there was some polemical discussion about the relative merits of ground-seeding and aerial-seeding of clouds. Rationalists of various kinds criticised the government for wasting money on 'kratus' while it was evident that the rains came because of the low pressure in the Bay of Bengal. The brahmins did not deign to join the debate—they got their fees anyway—but no doubt the god 'Varuna', being a cautious fellow, prefers to work his boon through facts of nature such as a low pressure in the Bay of Bengal for it would be setting a wrong precedent to let empty skies rain. Anyway, there was some rain—heavy in a few places where cloud-seeding had been done—for a couple of weeks, thereby improving the one statistic the government is interested in: total precipitation of rain by the end of the season. The figure climbed closer to normal in the deficit districts. At one point the government made bold to say that only 10 districts were deficit, but at the end it acknowledged that 15 of the originally deficit 18 districts were still in a deficit, though the deficit was much less at end-August than at end-July. And that was that.

But the people are concerned with whether whatever rain has fallen has served their purpose, and if not why not. This is for them the real meaning of drought. And this is linked to not just the total seasonal rainfall, but to the pattern of rainfall, retention of moisture in the soil, ground water recharge and availability at cost-

wise accessible levels, state of repair of the irrigation tanks, siltage of tanks and project reservoirs, destruction of catchments, sand-quarrying in the streams that feed the irrigation tanks, and so on right up to the crop-loan policy of the rural banks. In the perpetually drought-prone taluk of Devarakonda in Nalgonda district, for instance, it rained hard and briefly once at the beginning of the monsoon, and then once again a month later. Each time the less prudent of the farmers hoped for further rain and sowed seeds—castor, jowar and bajra, in that order the principal crops of Devarakonda. The more prudent were wiser. For there was no further rain, and the moisture in the soil was not sufficient for the sown seed to sprout and live. Many of them had to sow a third time at the end of July when it rained again. But the repeated demand for seed had in the meanwhile pushed up the market price of seed by 50 to 100 per cent, while the banks were not giving crop loans. The rural banks and the farmers' co-operative societies—both of them meant specifically to provide crop-related loans to farmers—bluntly refused loans for those who had defaulted last season, which meant most of the poor and middle farmers, for last season had also been a drought season in Devarakonda.

SKewed IRRIGATION POLICY

The point is that such scattered and insufficient rain is not at all a rarity in places like Devarakonda. To the extent that the problem is natural, one can talk—as politicians incessantly talk—of bringing the waters of the Krishna river to Devarakonda through old or new irrigation projects. But however many such projects may be built, a large part of Indian agriculture—especially in regions such as Rayalaseema and Telangana—is going to be principally rain-fed for a long time to come, and what is not rain-fed will depend upon wells and irrigation tanks which too are fed by local rainfall unlike canals of river-projects which may be fed by rains in far-off catchments. And so measures to conserve rainfall—in the soil, under the soil and in the tanks—are of primary importance. It is on these that sufficiency or insufficiency of rainfall depends. It cannot be said that the government is unaware of this—at least soil conservation and ground water augmentation have been part of its avowed objectives for a long time—but the sense of urgency that pervades talk about projects on rivers is entirely absent here. The former is a resounding element in the incessant din of Indian politics, whereas the latter is never a topic of political polemics or disputes, not to mention hunger strikes such as Jayalalita's.

It can be fairly said that for all the talk of expenditure on soil conservation, minor irrigation and ground water augmentation effectively the only irrigation policy that the government of India has is to construct dams across rivers and improve the statistics of irrigated acreage by spectacular jumps whenever it can get the World Bank or somebody else to loan enough money; and otherwise leave it to individual cultivators to extend irrigation in their private fields by private effort through well irrigation. To aid this effort, diesel and electricity are provided by the government for pumpsets, often at a subsidised price. And in the last two decades bore well technology for deeper exploitation of ground water is being extensively encouraged through loans both to the farmers and the borewell companies. Evi-

dently, those who cannot raise enough resources are outside the framework of this extension of well irrigation. Mere tinkering with improvement of rain-fed lands, wanton destruction of irrigation tanks and neglect of evident opportunities for minor irrigation works—opportunities that abound especially in the hilly and undulating terrain of Telangana—that can help both the storage of rain water in tanks and the augmentation of ground water, are a corollary to this skewed policy. All of which becomes starkly evident and is called drought when the rains fall.

PREFERENCE FOR LARGE PROJECTS

The rural rich who control provincial politics in India are not unaware of this—indeed even the least literate of the cultivators of drought-hit areas are fully aware of all this—and yet you hear the leaders make little noise about it. The scientific ideology of admiration for the kind of dramatic statistics associated with big projects—five lakh acres to be brought under water at one go and so on—may be partly blamed for blunting the awareness of the leaders and the led. And depending on one's theoretical proclivities one can then go on to blame science—bourgeois male/occidental/white—for causing drought. But ideology is only partly the culprit. The provincial political elite prefers solutions with dramatic results to less spectacular measures that add up bit by bit overtime and geographic space for a variety of reasons. Their political time-frame is short, often less than five years and their political idiom is structured accordingly. When water for five lakh acres is being promised or demanded, no mention need be made of which five lakh will be watered and when, and one can talk of the whole of one's political constituency being Hooded with irrigation water in a short while, if only the government—or the opposition, or the World Bank—were not so cantankerous. That kind of grandeur is just not possible with soil conservation. And whereas canals bring only benefits (or so it seems), soil conservation, tank maintenance and ground water augmentation require some sacrifice, especially on the part of the rural elite that is misusing natural resources unconscionably. Finally, big projects yield politicians clout and money, for if they are themselves not civil contractors (most of them are), than their friends are, and even otherwise there are sizeable commissions to be made from project and canal contracts which cannot even be imagined in the case of other irrigation programmes. For instance, reliable gossip has it that Rambhoopal Reddy, the MLA who recently vacated the Panyam assembly seat so that chief minister Vijaya Bhaskar Reddy could get elected to the assembly, demanded and got Rs 50 lakh as 'protection money' from the construction company engaged in building Canals for the World Bank-aided Srisailem Right Bank Canal project which runs partly through the Panyam constituency. It would be difficult to imagine even one-hundredth of that amount going the way of local MLAs if the nation's irrigation policy had been more democratic.

And so the river Krishna, in which there is little water left for any new projects, becomes the focus of all discussion of drought in Rayalaseema and southern Telangana, the principal areas of drought in Andhra Pradesh. Politicians talk incessantly of bringing the waters of the Krishna to their district, whichever it is. Their plaint that the coastal Andhra districts have benefited twice over from the Krishna river is quite true and just. First with the barrage built across the Krishna river by the British in

the 1850s, and then with the Nagarjunasagar project of post-independence years—which was one of the occasions when Nehru employed his famous 'temples of modernity' idiom—the Krishna waters have been taken up and down the central Andhra coast to water today's green revolution fields. The Srisailem project upstream on the same river was reserved for hydel production. With persistent agitation by politicians and people of southern Telangana and Rayalaseema, Srisailem has been converted into a multi-purpose project, and canals are being dug to water parts of Nalgonda in Telangana and Kurnool and Cuddapah districts in Rayalaseema. God—or rather the World Bank—willing, the canals will be soon complete.

DESTRUCTION OF TANKS

This is good, and undoubtedly a positive achievement of the landlord-politician class of drought-hit Telangana and Rayalaseema, to the extent that they are responsible for it. But this class will never talk about the destruction of tank irrigation and the over-exploitation of ground water, sins to which this class and its government have been a party. Much less will it talk about the complete neglect of rain-fed lands in which nobody is at all interested, for those who have the money can sink a borewell and the others can go to hell.

And yet the actual nature of the cultivation is precisely the reverse of these priorities. Eighty-four per cent of cultivated land is rain-fed in southern Telangana, and 82 per cent in Rayalaseema. Of that which is irrigated, 65 per cent is irrigated by tanks and wells in Rayalaseema and 62 per cent in southern Telangana. Canal irrigation is confined to the remaining. The completion of the Srisailem left and right canals will not alter the picture qualitatively. In the foreseeable future. Telangana and Rayalaseema are going to be preponderantly rain-fed and yet rain-fed land figures in the political polemics concerning drought only as land that is potentially to be flooded by the waters of the Krishna—or even far-off rivers such as the Godavari—if and when those waters are brought to the parched lands of Rayalaseema and southern Telangana.

The way tank irrigation has been destroyed is both criminal and pathetic. Both Telangana and Rayalaseema have a large number of irrigation tanks. While tanks and wells are equal providers of irrigation in Telangana, in Rayalaseema wells pre-dominate over tanks. Most of the Rayalaseema tanks were built during the reign of the Rayas of Vijayanagar (after whom the region gets its name) while in Telangana successive rulers from the Kakatiya kings onwards paid attention to the building and the improvement of tanks.

It is customary to hypothesise a 'village community' that collectively maintained and benefited from the tanks. That the 'village community' (whatever that expression conveys) took an active interest in the tank system is a fact, but the process was not exactly idyllic. The maintenance of the tanks was with the forced labour of the dalits and other lower castes. If the upper castes also chipped-in with labour, it was because they were the principal beneficiaries of the tank system. Even among them access to tank water was not equitable. Priority rights were with the dominant landholders of the dominant castes, and the others had access only on their sufferance. Such at any rate was the situation as we know it in the early decades of this century, and there is no reason to imagine a golden age of equitable community spirit that degenerated to depths of self-

interest in the historical equivalent of the age of 'kali' that is, British rule. That there was a greater community spirit in the medieval Indian village than is possible in today's world does not mean that the whole village thought and acted as one. That community-spirit was principally caste-centred and did not always extend to the whole of the village community. Tank irrigation thrived in conjunction with the caste-determined rural Indian social structure. Benefits accrued to those at the top but the maintenance was with the forced labour (the caste obligation) of those at the bottom. The British did nothing to break the caste system but their system of heavy taxation and other attendant changes upset the agrarian arrangements of old to varied extents. With the spread of democratic ideas and movements, the caste obligation of the dalits has been socially rejected by the lower castes and juridically abolished by the modern Indian state. The state should then have taken upon itself the burden of maintaining the tanks but it did no such thing. The rural rich were just not interested in maintaining them if that could not be got done free by the poor. Instead they took to well irrigation, improved upon in later years with electric/diesel pumpsets and borewells. That took care of their fields, and they would continue to enjoy their first priority access to tank water so long as tanks existed. If the tanks in due course became defunct due to negligence, then that was that. They had their electric pumpsets, and deeper and deeper borewells, and they would put pressure upon the government for more projects on far-off rivers to satisfy their political constituency, but that was about all. The 'village community' could look after itself. Indeed, many of them have converted the silted tank beds into cultivable land parcelled among themselves or their faithful followers; tanks near urban centres have had housing plots carved in their beds with everybody's connivance, and whole housing colonies have come up in tank beds close to even small towns. And there are cases where brick-kilns have been set up in tank beds.

Thus we have, parallel to a preponderant interest in big projects on the part of the state, and an indiscriminate spread of well irrigation—not only geographic spread but a deepening that goes down to 170 or 220 feet these days—a rapid deterioration of the excellent tank system and total neglect of water retention capacity of the soil, and of tank and stream catchments, in both Telangana and Rayalaseema. Rayalaseema has a lower rainfall and therefore needs a more careful husbanding of the soil and of rain water as well as a more diligent maintenance of tanks. It has therefore been a bigger sufferer, but certain parts of Telangana, especially Nalgonda and Mahabubnagar districts, threaten to match Rayalaseema in the destructive neglect.

There is, for example, quite a big irrigation tank at Gooty in Anantapur district of Rayalaseema. Anantapur being one of the worst of the drought-hit districts in the country, the tank had gone dry many years ago and nobody had bothered about its ill-maintained bund and silted bed. Suddenly, four years ago, it rained heavily in the catchment of the tank and water from the drought-denuded land rushed into the tank. The tank filled fast and the bund breached, washing away the Gooty-Guntakal road and the crops sown all around. The much-awaited rains left devastated crops and a freshly emptied tank behind. Commenting on the state of ill-maintenance of tanks, a local official then said: "in the good old days it was enough for the Reddy to snap his fingers and the labourers

would rush to repair the breach... who commands such respect these days..." (Reddy, in Rayalaseema, is both the name of a caste and the designation of the village headman, the 'mukhia'). This variant of the idyllic village community theme that turns up in nostalgic social science writings expresses the problem succinctly. The Reddys of Rayalaseema have not stopped snapping their fingers but they have other purposes these days—such as getting votes rigged on election day. And the snapping of fingers is obeyed not as a caste obligation but as a more complex subservience to economic, social and political power that is of little use in re pairing tanks. And so the Gooty tank remained neglected, though the breach of four years ago was temporarily filled up with sand bags. This year there was again a heavy downpour in the neighbouring hills of Kurnool district. The water rushing down the naked hill-sides rushed fast into the Gooty tank, once again filling it and breaching its bund. This time the Hyderabad-Bangalore national highway and the Madras-Bombay rail route were temporarily washed away along with farmers' fields, and therefore the breach made national news. The tank is again empty and the farmers in its ayacut are a bemused lot, for they are told that rainfall has paradoxically been well above normal! In Anantapur this drought season, and therefore they need have no fears.

To THE SLAUGHTER-HOUSE

As we have said above, the wanton destruction of the tank system has been paralleled by an alarming over-exploitation of ground water by those who can afford the cost. One of the worst affected districts in this matter is Nalgonda. Farmers of the arid areas of the district are no longer talking of dug wells. They are there but they have all gone dry and that is that. They began going dry with shortage of rain and then they all went dry as the bores came. Talk of wells is to talk only of borewells, and that means only a section of the farming community is talking of wells. As the bores go deeper and deeper more and more farmers are pushed out of the class that has access to ground water, for a deep bore renders neighbouring bores dry, like the hungry roots of some giant tree the tubes are reaching lower and lower into the bowels of the earth to pump out water into the paddy fields. The borewell companies too are mostly owned by the rural-elite-turned-businessmen of the district. It is these companies of Nalgonda that are at the forefront of the state's assault on its ground water resources.

What happens to those who are thus pushed out of the race? What happens is that when the rains fail, they join the ranks of those who were never in the race. They sell off their bullocks, pair by pair, hoping that the last pair will not have to be sold, for at least one pair will be needed if and when it rains. They sell them as cheap as Rs 1,000 per pair, knowing well that when the need arises again the bullocks cannot be bought for less than Rs 3,000 each. The cattle are driven to the weekly cattle fairs at roadside villages and towns, an institution still widely extant in Telangana and more so in Rayalaseema. Even at normal times there is a trickle that goes the way of butchers, though the principal sales are from farmer to farmer via middlemen. But with the onset of drought it is the slaughter-houses that take over the weekly cattle fair. Dozens of lorry-loads of cattle are taken away—the legs of the animals deliberately broken at the knee joints to prevent them from jumping off the vehicle—each week from almost all the cattle fairs in the drought-hit districts.

There was, of course, a time when governments used to have a policy of selling some amount of partially subsidised fodder to needy farmers. The amount supplied is usually extremely inadequate compared to the need—one week's fodder for one pair of cattle sold to about one farmer in a hundred is a fair description of the relief usually given—but at least a token attempt at fodder supply used to be made. This season the government of AP has not deigned to indulge in such a tokenism. With supreme aplomb the farmers were told that the government would spend money only on long-term measures such as percolation tanks, check dams and drinking water bores, and would not spend money on immediate relief for that is a drain on the budget and does not improve assets. But as cattle are a long-term asset and the denial of such a short-term need as fodder has resulted in a long-term loss, whereas check dams and percolation Links are such long-term things that they never happen, and the long-term drinking water bores go dry after a short-term, the farmers are understandably in a thorough semantic confusion about long-term and short-term. But the truth seems to be that as part of the ongoing fiscal restructuring under the aegis of the IMF, both the funds and the philosophy are lacking for any such wasteful thing as drought-relief.

As the cattle go to the slaughter-houses their owners go to a different kind of a slaughter. (It was the ancient Indian "rishis who first spoke unblushingly of quadruped cattle and biped cattle.) They migrate to canal-irrigated areas, if there are any nearby, to offer their labour cheap for transplanting and weeding paddy; if there are none nearby, they migrate to Hyderabad or farther still to that mother of slums called Bombay. The horrors of last December and January that forced as many south Indians as Muslims to leave that city are mostly forgotten; anyway those who came back that time and those who are going now are different people. That city's employers of cheap immigrant labour and the Shiv Sena have a different set of prospective victims now.

The most systematic migration takes place from Mahbubnagar, a perpetually and very badly drought-hit district of southern Telangana. Called Palamur until it was renamed Mahbubnagar in honour of Nizam-ul-mulk Mahbub Ali Khan, the migrant labour of the district is popularly known as Palamur labour. It is estimated that whether the government recognises a year as a drought year or not, about 5 lakh labourers migrate out of the district nine months in a year to work on project sites in all corners of the country. They work in bondage to labour contractors attached to project construction companies. They are paid some advance in the village and taken to the project site to work for the specified duration—usually about nine months from the end of kharif sowing and transplanting till the next kharif season. Their capacity for hard work and their pride that the toil of Palamur labour has created projects in all corners of the country is matched by their miserable living and working conditions—bad food, low wages, wretched dwellings, exposure to infections, denial of all legitimate rights of workers and sexual harassment of women. If the normal migration is five lakhs a year, the figure gets bloated in years which are officially recognised as years of drought.

DAMAGE BY QUARRYING

Statistical estimates of how much rain water gets stored in usable form—underground, in the tanks or in the soil—and how much goes

unused do not really deserve the honour unthinkingly accorded to numerical information in the prevalent positivist intellectual climate, but yet the rough estimate that only about half the rainfall finds its way to use in our country is revealing. As said earlier, Telangana has an undulating and rock-studded terrain marked by numerous big and small streams. The big streams (called 'vagu' in Telugu) have a steady and usually sandy bed, whereas the small streams (called 'vorre' in the idiom peculiar to Telangana) are more like wild slashes in the earth and have no proper bed. Irrigation tanks have in the past been constructed so that they are fed by the vagus and the vorres. And the tanks are usually part of a system of two to half a dozen built so that the overflow from those above feeds through streams into those below. There is considerable scope for using modern engineering techniques for improving and maintaining this system. One does read and hear about such projects in official documents and speeches but nothing seems to be getting done. Though Rayalaseema is worse served in the matter as it has a relatively flat terrain, what is really lacking is the intent to ensure that whatever rain does fall is made available to the people for drinking and cultivation.

While a positive intent is absent, the unrestricted process of development leads to a contrary effect. We have already spoken of the over-exploitation of ground water through borewell technology, which has led to even shortage of drinking water in quite a few villages, though the drinking water problem is officially fully solved by the installation of drinking water bores in a plurality in almost all villages. And of the conversion of tank beds into fields, housing colonies and brick kilns. We will end with another striking example. The flourishing growth of Hyderabad in the last decade has led to extensive quarrying of sand which is most accessibly available in the numerous streams of neighbouring Nalgonda and Mahbubnagar districts, streams that feed the irrigation tanks. Quite a few streams of these districts located within 100 to 150 kms of the state's capital city have been emptied of most of the sand in the bed, leaving the bed hard and flat. The effect is that when it does rain, the water that rushes into the stream which would normally have percolated gently through the sandy bed and would have partly augmented the ground water and partly fed into some tank, now becomes a flash-flood that breaches tanks and floods the surroundings. It was the neighbouring farmers who first noticed that sand quarrying in streams was resulting in loss of potential ground water recharge, and that their wells were going dry faster than normal after the sand in streams near their village started getting carted in lorries to Hyderabad. A grumbling agitation is in the making in villages near the affected streams of Nalgonda and Mahbubnagar districts, which are even otherwise in the drought belt.

Many such examples—bigger as well as more minute can be given to indicate how, in the absence of a positive policy regarding rain water conservation, the 'natural' process of development works in a contrary direction and destroys existing mechanisms of storage, retention and recharge. All of which is part of 'drought', whether or not the monsoon is a failure. Except that when the monsoon does fail, all the hidden sores get exposed and take the newsy form of cattle being led to slaughter, parched fields cracking up, and an occasional poor man or woman dying of hunger.