

WOOD FOR DOMESTIC FUEL - A 'CRISIS'

S.S. CHITWADGI*

Introduction

India lives in villages. Firewood plays a vital role in the economy of rural India, since there is no other energy source at hand for domestic purposes.

Part of the Urban population still rely on firewood since urban poor cannot afford other costly energy. The firewood comes from distant hills and long distances. With transport cost rising, those depending on firewood are finding it difficult to purchase firewood.

So far, revenue uncultivated lands are emptied and practically lying bereft of any worthy vegetation fit for using as firewood. They are now mostly unproductive.

The Bhumiswami lands were left with trees growing as vestige vegetation. There were some rules governing their felling. Of late the Government of M.P., made concessions extending to non-nationalised trees for removal, with presumptions that such trees will be felled that are grown by the Bhumiswamis. It so happened that whether grown by farmers or remained unfelled, during cultivation, naturally grown in the fields, came to be felled and marketed at their earliest possible. Only nationalised tree species still stand probably for want of permission. In fact these old trees have no chances of survival any more, what to talk of putting any increment. They have outlived their lives.

Reserved and protected including Government unclassified forests are poached for firewood day and night and firewood pooled to consumption centres including road side tea shops and 'dhabas' by way of head loads, ashloads, trucks and tractors and trains too carry firewood. What remains left behind in Government forests are only scattered mature and over mature mostly nationalised species, more scattered with none of trees or bush growth making the scanty ground green and connecting the overwood canopy. No trees may take the place of old ones if the old are laid down on ground due to old age or blown by winds. As it is, the annual fires have scorched to half their height and more above the ground level waiting for a cyclone or a conflagration to rest them on the ground.

Then, what is that which contributes to fire wood? Everybody in authority/public believes that what comes as head load or any other load is dead/drying/lying on the ground. When fires repeat once or twice or more often inside a year, how on earth the dead/dying/lying firewood escapes from being burnt to ashes?

It is necessary to know that the forests do not generate any dead wood coming within the definition of firewood. That which is brought is all from live trees made to die/dry skillfully to hoodwink everybody who would by mistake question the veracity of the firewood definition.

* I.F.S. (Retd.)

How long can this continue? Wherever forests recede, deserts follow leaving not a blade of grass on the floor. Life supporting soil is drained of flora and fauna in/on it.

Reverting to Forest Policy, 1988 particularly para 4.3.4.3 which dictates :

"The life of tribals and other poor living within and near forests revolves around forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuelwood, fodder, minor, forest produce and construction timber should be the first charge on the forest produce. These and substitute materials should be made available through conveniently located depots at reasonable rates."

"Conveniently Located Depots at Reasonable Rates"

The Madhya Pradesh Government declared open all forests to collection of firewood on head loads. Then the question of establishment of depots and sale of firewood, fodder and minor forest produce through "Conveniently Located Depots At Reasonable Prices" did not arise. 'Substitute' (vide para 4.3.5) was meant to distribute appliances like solar-cookers, 'chullas' etc. If policy was made to work, even gobar gas plants in large numbers would have been functioning. With free access for any quantity of firewood, alternate energy appliances could not be popularised.

Supply was (vide para 4.3.4.4) to be considered on the grounds of carrying capacity, of the respective site.

This is not even conceived, what of delivery? Openly, vide para 4.4.1, forest

lands are diverted with no adequate compensatory successful afforestation.

When forests, are thus encroached for extending agri-cultivations, grazed very heavily, burnt every year, exploited constantly by wood poachers by thread bare search and hunt for firewood, and when harvesting NWFP from trees, trees themselves are harvested ruthlessly, and also when those meant, paid for, forest personnel are maintaining silence and indifference over the absence of natural regeneration; where from firewood has to be generated for collection by head loaders?

To cite an example, one of our best Working Plans viz. Vidisha Forest Division 1977-78 to 1991-92 by late Shri Tomar gives an analysis of firewood as under (Table 1).

Table 1
Local Annual Demand

Type of demand	Qty. required m ³ /annum (round)	% of total
A Timber and poles for		
(i) House building & repairs	3438	2.4
(ii) Bullock carts	1709	1.2
(iii) Wooden ploughs	713	0.5
(iv) Bedsteads	1177	0.8
(v) Others	1373	0.9
B Fuelwood	1,34,588	94.2
	1,42,998	100

When firewood which is brought from all areas outside Government forests, is almost nil, except for a small source of agricultural residues and dung which are used at the expense of genuine needs of

Table 2

Particulars	Permissible annual cut (m ³)	Actual removal in 1974-75	Local annual demand from forest (m ³)
Timber	11,200	9635	6700
Fuelwood	40,000	60,000	88,500
	51,200	69,635	95,200

fields as organic matter to enrich productivity of farms, the only source left, that too being tapped every heavily by head loaders, is Government forests.

Gross deficit in firewood is alarming. By now (from 1974-75 to 1997-98) things have gone from bad to worse. The position repeats in every district. Any one travelling to Betul, to reach Betul before sunrise, starting past midnight from Bhopal, will come across a large number of head loaders - men and women and children - sweating even in winter, under a burden of long, lanky, firewood headload, lined up all along the road to feed with firewood those living in the plains below hills, in the Narmada Valley - all firewood starved areas.

Conclusion

As an optimist, I have reasons to be still hopeful for conservation and that we have the required wisdom to correct ourselves to mend matters, provided that the following are carefully attended to:

- * Stop head load collection.
- * Delivery of every forest produce through recognised Depot, well recorded, on

scientific working under W.P. Prescriptions.

- * Organise NWFPs collection by deferred collection or confine to part of the tree crown as east, north, west and south parts so that part not harvested may develop fruiting/seeding to regenerate on the ground below.
- * Fires to be prevented. Modern methods to be adopted to prevent.
- * Grazing not allowed, if allowed only regulated, according to the carrying capacity only in areas set aside as Grazing Working Circle.
- * Correlate annual removal with annual production with a wide margin left *in situ*, as a security for future yield.
- * When supplies fall short, go in for rationing.
- * Short rotation Firewood trees to be identified, grown and harvested only after regenerating adequately, on suitable sites. Specially as Agro Forestry.
- * Natural regeneration of (Normal) Natural Forests is the first charge on the foresters. They are taught how to sensitize ecosystems to bring out adequate regeneration. Conditions adverse like fire, grazing, unorganised collection of NWFP, have to be prevented.
- * Public awareness of using forests to the extent of their carrying capacity limits to be created. For JFM to succeed, forest personnel have to exert to aim at sustainable conservation of existing

growing stock and develop to achieve normal age gradations and normal increment. A good and benevolent governance has to be ensured to the minimum extent without prejudice to public interest. Governance as a guide but not to harass the public.

- * Strict adherence to Forest Policy is needed. If policy not workable policy to be modified by competent authority.
- * Private Companies may have to be controlled by green audit, so that investors are not disappointed. There are examples of incapability by the companies of standing by the promises held out.
- * No Chemicals to be used in management of natural forests for regeneration or protection against pests. There are alternative organic means to prevent pests.
- * Plantation forestry to be safeguarded by careful selection of site factors since inputs hardly influence growth beyond pole stage. Early enhanced growth is at the cost of structure of wood. Hostile sites left for natural colonisation when strictly protected.
- * Nistar needs to be redefined and scrap collection of so called dead and fallen wood as firewood. Even if it be there, let that contribute to the organic matter to enrich forest floor, being fully fire protected. Depots to be charged with firewood by working coupes as per working plan prescription.
- * Possibilities to be explored to certify every forest produce including NWFP to the effect that it is derived from

following strictly conservation processes. If not certified it is subject to be seized. This may cause some inconvenience but if properly followed the entire business will have a chance to realign and geared to proper use of forests left with us.

This is most desired in respect of medicinal plants. The present practices are entirely very damaging to the forest conservation. Few recognised dealers only handle medicinal plants collected through indigenous collectors, known for long in the trade without the knowledge of forest/revenue authorities. There is neither the record on quantity nor area description from where collected and when collected, at what cost and what methods used to store and transport process. This needs to be checked by the Government and brought to light to quantify and record each medicinal plant.

- * Compensatory plantations when found established the forest areas to be deforested for any developmental purposes.
- * Working Plans to be reoriented so that there should be no harshness to the public depending on forests. The W.P.O. should defend his plan in a district advisory body and he has to be in charge as Conservator to supervise his plan prescriptions being implemented. The concerned University should be associated while drafting plan. By the time prescriptions prove their merit-cum-worth, the university should award Ph.D. to the W.P.O., in recognition of the successful working plan. Inventory processes should be undertaken by W.P.O. as was done in Shri Tomar's Plan.

- * Firewood crisis can be averted only when alternate energy sources are pushed through in a big way. The Forests and Environment Department should hold charge of alternate energy source department also to provide utilizable alternatives to release pressure on natural or man made growing forests.
- * Every farmer should be encouraged preferable through incentives to combine trees compatible with agri-crop so that he harvests firewood, NWFP and small timber and green fodder to meet his forest based products, without entering into forests.
- * *Biodiversity*: Biodiversity Conservation has to be a major thrust in management of forests. Sample plots to denote biodiversity full content, well protected and as living example to be laid out, as a guide in a particular site or sites, to serve as model.
- * In a well-managed forest ecosystem, every constituting member of the ecosystem is said to be conserved including firewood production, to meet maximum demands for firewood. Firewood generally forms part of trees harvested except a few trees which go entirely as firewood.
- * Wood waste should be converted as fuel bricks and used. Full utilization of wood-cellulose to be ensured with minimum losses, since so far cellulose could not be synthetically laboratory made although man is moon returned.
- * An effort should be made to identify watersheds to extend watershed management details required to conserve soil and water benefitting the ecosystem growth production.
- * Imports to last till local forest ecosystem production matches or exceeds demand, to release pressure on the forests helping ecosystem to recuperate to develop production of timber and firewood, to the desired normal extent.
- * A system of audit, regarding incorporation of natural resources and their depletion into a National Accounting System, has to be established. This is under contemplation under the Ministry of Environment and Forests in concurrence with Auditor General, Government of India. Unless growing stock is known extent of depletion cannot be ascertained and the negligent booked.

SUMMARY

Firewood scarcity has not provoked much attention. The villagers collect the fuelwood from the forest as a matter of their traditional right. To solve the problem some measures have been suggested which will also help in conserving the environment and reduce pollution.

घरेलू ईंधन के लिए लकड़ी - एक संकट

एस०एस० चित्तवाडगी

सारांश

ईंधनकाष्ठ दुर्लभता पर अधिक ध्यान नहीं दिया गया। ग्रामीण जन पारम्परिक अधिकार की तरह वनों से ईंधनकाष्ठ बीन-बटोरते हैं। इस समस्या को सुलझाने के लिए कुछ उपाय सुझाए गए हैं जिनसे पर्यावरण का संरक्षण करने और प्रदूषण घटाने में ही मदद मिलेगी