CHAPTER : SEVEN

SUGGESTIONS FOR AN UPLIFTMENT OF THE GARBAGE PICKUPS

TWO HUNDRED FIFTEEN
Summary: The precarious existence of the garbage pickers make it necessary to suggest some way-outs which will improve their present condition. In this chapter, some of the remedies, both internal and external, have been prescribed which are, in fact, based on a field study over the related areas.

The external remedies bring into light two projects — One of which is a pilot project going to be started shortly whilst the other is already in existence — and overhaul these projects by tracing out the processes involved therein which require very simple manual operation. In our opinion, these 'processes' are the potential place for alternative employment where the garbage pickers can be suitably absorbed.

Moreover, in order to build up any new project concerning over the utilisation of garbages, specifically, to make it a stable and profitable one, there should be an exchange of the inborn experience of the garbage pickers with the respective authority. For a vast dumping ground like Bantala, there is every possibility of such latent waste materials which might have profound importance if properly exploited. The only key to get such materials is the garbage pickers. They deserve due importance.
The internal remedy for developing the financial condition of the garbage pickers is to form a co-operative either by the garbage pickers themselves or by some social organisation with full support as well as sympathy for these labourers living in the marginal pole. Such a co-operative society could earn 'surplus' if it could hoard waste materials for some period since there exists both seasonal and occasional fluctuation in the prices of waste materials. However considering some practical difficulties, we have suggested that initially such a co-operative should be formed by some outside agencies as mentioned above.

Finally, in this regard, our opinion is the prescribed remedies could provide only a stable and better earning for the garbage pickers. But for an over-all development, we have raised some additional issues and solicited further exploration from the social scientists of future period.

PREAMBLE

IN chapter four, we have delineated the organisation of work amongst the pickers in the Bantala dumping ground which
is, by nature, semi-formal. We have analysed that the garbage pickers are unlike to industrial out workers. They organise themselves at work in a special way: there is no fracas all time amongst the pickers what one might expect from such an environment. But at the same time, the degree of trust between the pickers is too poor to work as a 'team'. Within these features, the garbage pickers of Bantala organise themselves at work.

Although, in the micro level, there is the existence of perennial poverty, but in the macro level, there is a good indication of entrepreneurship and innovative capacity. The garbage pickers of Bantala consider the petty buyers as the pillar of success and believe that there is a little more money to earn in the dumping ground. But a countable number of pickers are not motivated towards this 'belief'. Perhaps, this is the reason why they like only to defend their right to work and cannot go ahead, irrespective of the prevailing barriers, by making enough money.

What we have analysed in the previous chapter can be summed up as follows: the activities in the garbage dump constitute
work which generates income for the pickers and provides a supply of essential inputs for the industrial economy. The garbage pickers are not unskilled, unproductive, unorganised or unenterprising. But the manner in which they are carrying out their daily operation is not one which could improve their pecuniary condition in the long run, nor it could uproot the barriers that prevail in the mid way.

Indeed, we should think of policies that will make this picking activity a stable one and at the same time will enhance the level of income of the pickers, considering these aspects, we suggest here the following remedies:

PART. ONE: EXTERNAL REMEDIES

(A) THE BIO-GAS PLANT

The CMC is going to start a pilot project for generating BIO-GAS from municipal solid waste in collaboration with Burn Standard Company. According to the official source, this project will start its operation within the middle of 1989. The location selected for this project is adjacent to the Bantala cheque post where the preliminary work like

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installation of essential machineries has laready been completed.

This project will generate bio-gas from organic vegetable matter like vegetable waste, banana leaves etc. In order to obtain the basic raw material, the CMC has a plan for utilising the market garbages of Calcutta. The daily requirement of such raw material will be 500 kgs.

The basic object of this project is to utilise the garbages in different purpose. The authority considers this project most urgent because alongwith other benefits, it will control air pollution by reducing the quantity of market garbage. The bio-gas plant, as reported by the officials of the CMC, will serve three sectors. These are household sector, industrial sector and agricultural sector. In the former sector, bio-gas can be utilised for lighting up the domestic oven while in the industrial sector, it can be used for running the generator. In the latter sector, the disposed slurry of this plant can be utilised for soil conditioning.

The required land for implementing this project has already been provided by the CMC which will be responsible for maintenance, production and supervision. The Burn Standard Company
will provide necessary finance in this project. At present, this project is in its final stage. The design of this project has been framed by the CMERI of Durgapur. (please see note 'a') which shares the responsibility of installation and trial of the machinery. Both the CMC and the CMERI are the autonomous body while the Burn Standard Company is a Govt. of India Undertaking. The department of non-conventional energy system, Govt. of India, is the central authority of this project.

The processes related to the production of bio-gas has been planned by the CMC in the following manner:

In the first process, market garbages will be stored in the platform inside the workshop by the municipal trucks. Initially, three trucks of such waste material will be needed. The market garbage will be disposed off from municipal truck through tipping gear. This is a totally mechanised process.

In process two the required material will be sorted out manually. In particular, organic vegetable matter will be separated manually from a variety of waste material usually found in the city garbages. According to the official source, this process cannot be converted into a mechanical one.
In the third process, the material, so sorted out, will be washed clearly with the help of trommel (a mechanical device). There will be manual charging for putting the material inside the trommel. The latter will be operated by one semi-skilled personnel preferably having some knowledge in electricity and maintenance. The manual work involved in this process (i.e. charging material inside the trommel) may be carried out by any unskilled worker. The authority is looking for such personnel for this job who are within twenty five years of age. This process is, therefore, partly mechanical and partly manual.

In the fourth process, there will be size reduction of the organic vegetable matter in order to bring them in desired size. This work will be performed by two machines, namely, Shredder and Chaffe-Cutter. In order to operate these machines, there will be the need of skilled machine men. In addition, there will be manual feeding to both the machines. This latter work does not require any skill; hence, it is open for unskilled worker.

Process five involves in charging the raw material (i.e. the organic vegetable matter) inside the digestor manually. This particular process of work is virtually open to anybody since the job does not require any specialization. The authority, however, likes to carry out this function.
mechanically with the expansion of the project.

There after, bio-gas will be generated inside the digestor automatically. There would be a time gap of fourteen days between the first charging of raw materials inside the digestor and the first production of bio-gas. As daily charging will continue, the bio-gas so generated, will be collected in a gas holder. Finally, it will produce electricity through the operation of generator. The latter requires a skilled operator who will switch it on and will be responsible for its maintenance. The authority likes to appoint a person with ITI (electrical) diploma preferably having three/four years experience in similar job.

There is ample opportunity for the garbage pickers to grow up with this project, as a number of processes included there in require a very simple manual operation. These are, specifically, process number two in full and process number three, four and five in part. Though, process number five may be converted into a mechanical one in future, but at present, this can well be considered as a manual process.

Therefore, we may consider this project as a potential source of alternative employment for the garbage pickers. The latter with their present level of skill and productivity may easily be absorbed in the processes mentioned above. The officials
have a positive view towards the garbage pickers. They agree with us that the latter with their in born experience might have a good role to play in this project. The policy makers, while planning for the personnel required for this project, should consider this particular section of labour with due importance. We have already mentioned that this is a pilot project. What we are yet to mention is that as a source of non conventional energy, the bio-gas has an increasing demand in the present market, one might presume a bright future of this project. To counsel for an articulation of the garbage pickers with this project is justified from all respect. Specially, if we consider that this project will not only improve their earnings but also exploit their productivity and skill in a proper perspective.

(B). THE COMPOSED PLANT

The West Bengal Agro Industries Corporation Limited has been started to produce manure near Bantala dumping ground since 1976. The types of raw materials require for producing manure are domestic garbage, night soil and refuges of beasts. The daily requirement of raw material is in between 125 to 150 metric tonnes while the output is on an average 70 metric tonnes. Such a manure is generally used in order
to make the land more fertile and has a long term effect. Because, although it may not initially boost up the production of crops which can be done by using chemical manure, but in comparison with the latter, the manure produced by the West Bengal Agro Industries, is more beneficial in a sense that the chemical manure affects the fertility of land by making the soil porous in the long run while this adversity can be checked by utilising this manure.

This project is under the control of the state Govt. of West Bengal. The top management consists of one chairman, one managing director and one general manager, under the latter there are four executive engineers. The daily production is carried out by twenty seven personnel of whom the majority possess technical qualification.

The process of work starts with the disposing of garbages by the tipping gear from municipal trucks which are put to the apron fider with the help of pay loader. Thus, the initial process is a complete mechanical process.

In the second process all unwanted materials like stones, glass pieces, leather etc. are eliminated from garbages. This process, therefore, involves in sorting of the garbages which is carried out manually.
In the third process, the materials, so sorted, are sent to the pulveriser from apron fider through conveyer belt which crushes the materials in order to make it dust. Like the initial process, the work of this process is also operated by mechanical device completely.

In the fourth process, the materials, so crushed, are sent to drum mixture through conveyer belt which, in turn, sends the same to windrow yard through discharge conveyer. This is also a mechanical process.

In the fifth process, the dust of garbages are kept in the windrow yard for maturing through natural process, specifically, through sun shine. In this process, very simple manual operation is needed for dressing and redressing of the dust of garbages in the sun light so as to dry it up quickly.

In the sixth process, the matured dust of garbages are taken to screening yard manually. Any person, capable of carrying weight, may perform this job. After screening, the residues are removed manually while the fine dusts are packeted also manually. However, the authority has a plan to carry out this function mechanically in future.

The disclosure of the process of work involved in the manufacturing of manure clearly indicates that there are processes...
which need very simple manual operation. These are process
number two, five and six. But, before going to enmark them
a potential for alternative employment for the garbage pickers,
we should consider some of the basic facts which are narrated
below:

Firstly, so long the authority does not employ any outsiders
for carrying out those simple manual operation, as discussed
above, other than their own labour force. The authority,
at the time of this interview, did not make any positive sign
so that it could be anticipated that the garbage pickers
may be absorbed in future period. According to the officials,
their own labour force is sufficient to carry out the necessary
functions, be it mechanical or manual, even in far future.

Secondly, the project itself is not operating for more than
two years. As a result, the workers and the employees concerned
with this project have been withdrawn by the authority. They
are, however, absorbed in different venture under the same
authority. The reasons for such hauling of work have not
been explained by the authority which only discloses that
there were some 'internal reasons' behind such cease work.
The authority describes such 'internal reasons' as 'confi-
dential'. We have been informed that the project will be
in operation very soon.

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Lastly, there is no plan to modify or expand this project. All attempts of the concerned authority is at present confined to re-open the plant only.

The above analysis makes it clear that this manure paint may not act as a potential source for alternative employment for the garbage pickers. Though the project has several processes which are suitable for the latter, but taking into account the present condition of the project, non-existence of any plan for future modification or expansion and, in addition, the policy like employment of own labour force, make this project beyond reach for the garbage pickers.

Besides, the CMC had two more proposals for setting one compactor plant and one incinerator plant. Unfortunately, these proposals had not been materialised due to the high requirement of capital for their necessary implementation. In these plants also, there were job opportunity for the garbage pickers. One point is clear from the discussion we held with the executive engineers of the CMC, whatever might be the method for utilising garbages for different purposes, it always relates to a common process, namely, sorting of garbages, which can never be performed mechanically. For this particular operation, the CMC would have to depend always on such labourers like the garbage pickers.
CONCLUSION

It would be prudent, therefore, to suggest that the more the growth of different plants for multipurpose use of garbages, the more the potential for alternative employment for the garbage pickers. Of course, this is not by any means to suggest that only for the sake of employment of the garbage pickers, such plants should be built up. In true sense, the garbage pickers have an indepth knowledge about the vivid kinds of waste materials which are available in the dumping ground along with their exact location and approximate quantity so available. If this 'knowledge' can be tapped properly, it might innovate new methods for utilizing garbages more suitably. In one occasion, a scientist of CMERI had been informed by a garbage picker about the plentiful availability of JHILLI (one type of garbage) which is the most desirable component for producing methane gas. The scientist, himself, confessed to us that he was totally ignorant about the existence of JHILLI in Bantala dumping ground and if he is asked to propose for a new plant by the top authority of the CMERI in future, he will submit a scheme for generating methane gas in Bantala.

And we would like to stress on this point. There should be an exchange of opinion between the authority and the garbage
pickers before starting up any new project. The former will get the 'cream' of knowledge which the latter possess traditionally. This might, in turn, have an effect to make the project more stable and profitable. And the latter will get the benefit of employment from the setting up of such new project. Hence, there would be mutual benefit which will bring grist to both mills.

PART TWO : INTERNAL REMEDY

One of the way out of improving the monetary condition of the garbage picker is to form a co-operative amongst them. The bulk quantities of materials sold regularly by the garbage pickers can be made more profitable if the individual sale is converted into a sale through co-operative. The pickers might receive two-fold benefits : Firstly, they will get comparatively better price whenever they will sale to the co-operative, because the co-operative, itself, will get a better price, through bargaining. The latter will be possible because the co-operative will hold a lump-sum quantity of materials. Secondly, the surplus earned by the co-operative may be distributed to the garbage pickers.

The nature of the waste materials collected by the pickers are not perishable. If a certain quantity of these materials
can be hoarded from the daily collection, it might pay more dividend to the co-operative. This is because of the fact that there is seasonal fluctuation in the price of waste materials. The data, we collect from field survey, will enumerate this point properly. This is furnished in the table below:

TABLE 1:23: THE SEASONAL FLUCTUATION IN THE PRICE OF WASTE MATERIAL

<table>
<thead>
<tr>
<th>SEASON</th>
<th>Paper Per:In (Kg Rs)</th>
<th>Iron Per:In (Kg Rs)</th>
<th>Glass Per:In (Kg Rs)</th>
<th>Plastic Soft Per:In (Kg Rs)</th>
<th>Plastic Hard Per:In (Kg Rs)</th>
<th>Alumunium Per:In (Kg Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>0.45</td>
<td>2.50</td>
<td>0.35</td>
<td>14.00</td>
<td>12.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Autumn</td>
<td>0.60</td>
<td>3.70</td>
<td>0.55</td>
<td>18.50</td>
<td>17.25</td>
<td>32.50</td>
</tr>
<tr>
<td>Winter</td>
<td>0.50</td>
<td>1.60</td>
<td>0.30</td>
<td>12.00</td>
<td>11.00</td>
<td>23.25</td>
</tr>
</tbody>
</table>

It is evident from above that the price of waste materials increase in autumn. In winter, such prices come down comparatively than summer (other than paper and aluminium). As all of the above mentioned materials are storeable for some time, the co-operative might enhance its surplus by selling largely in autumn.
The above also presents a picture of 'normal' price fluctuation of waste material in different seasons. Besides, according to the garbage pickers, there are occasional boosting up of prices of certain material which encourage the pickers to collect that particular material in bulk quantities. Consequently, the price comes down and the pickers suffer loss. Such loss can be checked if the co-operative has its own warehouse to store waste materials. The warehouse could provide a good contribution in the earning of the garbage pickers at the time of both normal and occasional fluctuation of prices of waste materials.

However, to form a co-operative amongst the garbage pickers is not so simple as it sounds. Firstly, the garbage pickers, themselves do not believe in 'team' work. As we have seen already, the total activities related to garbage picking is highly self-depending. The garbage pickers, do rely on individual capacity. This can neither be changed in overnight, nor could we expect something like that. There should be proper campaign, highlighting specifically, the benefits of a co-operative, amongst the garbage pickers. This may not be fruitful in the short run but, in the long run, there might be a change in the outlook of the garbage pickers.
Secondly, it is difficult to find out a suitable location for establishing warehouse whereby materials will be preserved for selling at a future period. Neither it is possible to set up in the area where the pickers reside because of its narrow space and congestion, nor it is possible to set up within the dumping ground as it is forbidden by the Municipal Act. (off the track, it can also be noted that according to this Act., garbage picking within the dumping ground itself is illegal)

Eyeing the above difficulties, it is doubtful whether any co-operative will at all be formed amongst the garbage pickers even in far future. Therefore, we could suggest that initially such an effort should come from outside, specially, from some social organisation with a keen desire for improving the pecuniary condition of these marginalised masses. This might have an impressive effect on the garbage pickers than mere campaign in favour of co-operative society. There is every possibility that once a co-operative is formed and the pickers witness its benefit, they will react accordingly. However, it can be well imagined that such a co-operative would have to face a cut-throat competition with the 'standard' buyers of Tangra.

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SUMMING UP

The above remedies will induce stability in the primary Stratum of the recuperative work and an incremental effect on the present level of income of the garbage pickers. Yet, these are the recommendations for the present period only. In the long run, question may arise as to how far it is viable to plan for financial improvement alone? Specially when, there is clear indication of entrepreneurship and innovation amongst the garbage pickers whatever little it may be, we should not forget that these marginalised masses are so characterised in such an environment which is wantonly severe. If it is the fact why we do not provide them an environment where such inherent features could evolve properly which might be helpful for the rest of the society?

And here lies the main issue. What would be our future outlook towards these labourers? Should we discharge our liability by providing only some alternative sources of earning for them? Or, should we proceed in a planned way for utilising the latent potential of the garbage pickers for an overall development of our society? Is it possible at all in the prevailing social set up?

These are some of the interrogatives on which further exploration is most welcome from the social scientists of future period.

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REFERENCES

(a) This portion of the study is based on the informations provided by the executive engineers of the CMC and the scientists of the CMERI (Central Mechanical Engineering Research Institute) of Durgapur. We held an interview with these top ranking personnel in February 89.

(b) Initially, the garbages of Baitakkhana market, Gariahat market and Barabazar Fal Patty (Fruit Centre) will be utilised.

(c) It is interesting to note here the physical analysis of Calcutta refuge which is as follows:

This analysis is the average of a number of samples collected in this regard: Source: Feasibility studies for Calcutta city: a report of the Central Public Health Engineering Research Institute: Nagpur: 3.

(d) We are indebted to the top management of the respective authority for providing us with the relevant informations in this regard. We held this interview in March 89.