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PRODUCTION AND DISTRIBUTION OF ORS IN  
BANGLADESH: AN ASSESSMENT OF THE DESIGN  
AND IMPLEMENTATION OF THE ORT COMPONENT  
OF THE SOCIAL MARKETING PROJECT

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ADDENDA:

1. Terms of Reference
2. Draft Proposal for the Purchase  
of Land by SMP
3. Request for Fixation of Price of ORSaline by SMP
4. Persons Interviewed
5. Background Documents

ORS Production and Distribution by the Bangladesh Social Marketing Project:

Summary of Findings and Recommendations, February 1986.

1. A more cautious approach toward investing in an SMP production facility should be taken. It was not clear to the consultant that all possibilities for making use of existing production capacity have been thoroughly explored. Furthermore, even if annual sales of 15 million packets was a certainty today and existing capacity could not meet this demand, an investment of the amount proposed for a single-product plant would be difficult to justify. Also, the small supply level available the first two years of the project seriously limit marketing tests.

Recommendations:

- a) Reformulate the investment project, planning for a multipurpose facility which will meet the needs for administrative and production space SMP will have in the future, including space for possible ORS production. This will reduce the direct investment in ORS Production by half to two-thirds.
  - b) Continue exploring the possibilities of expanded production by Essential Drug Company, and simultaneously attempt to contract for interim supplies from GK Pharmaceutical Labs, which has expressed an interest in using its excess capacity to produce ORS for SMP.
  - c) Apply for the necessary waivers, credits, and permits to order ORS production equipment, but reserve the final decision to order it until the local supply results have been fairly evaluated, and firmer estimate of demand can be made on the basis of trial marketing. This decision would be made in time for equipment to arrive as plant construction is completed.
2. Other potential constraints to project implementation were analyzed and none were found to be serious enough to warrant any major changes in strategy:
    - a) Prior marketing trials are only partially valid since a new, lower price has been determined for the packets by circumstances beyond the control of the project.

- b) The SMP is planning a promotional campaign which takes into account the possibility that brand advertising for ORS will be prohibited in the mass media. It appears unlikely that the project would fail even in the worst case since generic promotion and brand promotion through the other media will still be effective.
- c) Pricing the ORS at Tk. 2.00 will be such as to allow recovery of all direct products costs and still be affordable by most people. There should be no credible objection possible of anti-competitive subsidies.
- d) Other donors and national ORT programs have no strong reservations or objections to the proposed ORS marketing project.

3. A revised implementation schedule which takes the above recommendations into account is shown below:

ORS SUPPLY: Critical Activities	1986				1987				1988				1989				1990			
	I	II	III	IV																
Production by EDCO (80,000/mo)																				
Re-examine potential for more EDCO production																				
Obtain permission for multi-producer brand name and negotiate contract with GPL																				
GPL Production (160,000+/mo)																				
Design multi-use facility																				
Acquire land for project																				
Demand evaluation by market test in limited area																				
ORS sales through ethical channels (20-30,000/mo++)																				
Evaluate local suppliers' performance vs. demand projections																				
Construction of multi-use plant																				
(IF) Place order for ORS production equipment																				
Installation and trial run																				
Train QC and production staff																				
SMP production (400,000/mo)																				

This consultancy was intended as a review of plans for production, distribution, and sale of oral rehydration salts (ORS) through the Bangladesh Family Planning Social Marketing Project (SMP). See attached Terms of Reference.

## 1.0 Production Issues

Serious enforcement of recent legislation pertaining to drugs by the BDG has ruled out the continued importation of finished ORS packets for distribution by SMP because ORS is considered a simple enough product to be successfully manufactured locally. There are, in fact, several commercial and non-commercial local producers who at the moment are supplying the public and private sector distribution systems. The existing and projected levels of supply of ORS packets, the sources, and the present and projected demand have been studied intensively and documented in several recent reports by TESCON, SMP (Schellstede Project Proposal), WHO/UNICEF (Faust), NORP (Currey), JSI (J. Russell), PRITECH (Green and Louis), MRCB, and a forthcoming evaluation of BRAC. Estimates of the demand-supply gap, which SMP intends to help close by mass-marketing packets, range from 20 million to 280 million 1/2-liter packets per year.

SMP believes that a marketing program for ORS should not be undertaken unless the supply of packets can be guaranteed, and in response to this concern, USAID has consented in the terms of the Cooperative Agreement to finance a production facility to be managed by SMP if no other local source can be identified to supply high-quality ORS packets at a low price, reliably, and in the required quantities (up to 15 million per year after three years). The cost of establishing such a facility has been estimated by local consultants at nearly a million dollars, including the cost of land purchase.

Having approved this plan of action, USAID/B is now responding to reservations voiced internally and from outside the agency, and has asked PRITECH to provide an opinion on this scheme. These reservations can be stated as follows, if this consultant correctly interpreted them:

- Concern over the effect on and reaction by the existing private sector manufacturers of ORS of a publicly-funded production facility

for a product with which its distributors intend to capture a large part of the market.

- Concern over the rationality of a large investment in a facility to produce a single, low-value product, resulting in an internal rate of return which can be hardly considered attractive.

A key practical question that must be answered if there is to be any final resolution of these concerns, is whether or not a satisfactory alternative to the establishment of a new facility can be identified. However, it must be noted that the decision-making process is in this case affected by an apparent decision by the former Secretary of Health, who chairs the SMP Project Council, that implementation of the ORS project should not be considered if a production component is excluded from the plan. USAID may wish to discuss this issue with the Project Council since all possible local sources were not fully explored.

This aside, a search for an alternative permanent source of locally produced ORS was carried out by SMP in 1985. Potential sources originally included:

- a) Public sector producers with potential or actual excess capacity.
- b) Private pharmaceutical manufacturers currently producing and marketing ORS.

While there may be some possibility that potential production capacity exists among private sector drug firms not currently in the ORS market, this was not seriously investigated by SMP. As far as category a) is concerned, the focus of attention to date has been on the Essential Drug Co. Ltd. (EDCO), which has been producing ORS packets as part of its product line for the public sector health system, and has been the beneficiary of considerable external financial and technical assistance. It is wholly government-owned, but managed rather differently from most other state industries, and has shown great progress over the past years in its ability to meet the government's essential drug needs. Other public sector sources such as NORP and ICDDR/B were not considered to be suitable for reasons of lack of capacity or interest.

## 1.1 Essential Drug Co. as a Long-term Supplier

As witnessed during a visit to their Dhaka facility on January 29, EDCO is currently producing good quality ORS Packets on automatic equipment, at a rate of around 2 million packets a year (1/2 liter). The estimated combined maximum production capacity at their production facilities in Dhaka and Bogra is around 5 million, and since the present government requirement is roughly 3.5 million, EDCO have agreed to provide an interim supply of one million packets per year for SMP, possibly increasing the length of their workday if necessary. The question of whether EDCO could actually serve as a permanent source of supply for SMP is not easily answered, as the facts tend to conflict:

- Their present technical capability for ORS production, with the exception of some minor peculiarities in the choice of production equipment, is excellent. Quality control facilities and procedures are impressive, and all major production problems appear to have been solved.
- The Bogra facility was not visited, but at Dhaka it is clear that room for expansion of ORS production is quite limited. Nevertheless, the managing director agreed that it was possible to shift equipment around and renovate present storage areas for production if expansion were absolutely necessary.
- While EDCO is a public enterprise, it does have a mandate to show at least some operating profit, and it is difficult to understand why it would not find the apparent Tk. 0.30 profit it will realize on the sale of ORS to SMP attractive enough to want to perpetuate and expand it, especially if some capital equipment were provided in the bargain. (Sales price of EDCO ORS to UNICEF and to the Ministry of Health and Population is Tk. 1.00, as opposed to Tk. 1.30 to SMP).

- SMP concerns about lack of reliability of EDCO supplies and loss of control over production priorities may or may not be realistic. Certainly, EDCO has only recently become an efficient and reliable entity, and a change of management could mean reversion to past problems. It is not difficult to imagine situations where production might be halted for minor reasons that would not even affect a private or independent facility, although given the financial resources of SMP these could be largely forestalled by appropriate contractual arrangements and action.
  
- The fact that EDCO primarily produces the same product for the government and may tend to give it priority is not, on the face of it, a very strong argument. The situation is significantly dissimilar from the one Russell cites in Egypt. In that case, the parastatal manufacturer also had a mandate to make a profit, but the ORS it produced other than for the social marketing project was distributed in private pharmacies and was quite profitable, so when there was a production bottleneck, the commercial product received priority. In the case of EDCO there is actually a possibility, albeit not a strong one, that the government requirement for its ORS packets could diminish in the future, leaving it with excess capacity. This could happen, in principle, if NORP improves the quality and shelf life of its ORS product as recommended by Hans Faust (WHO ORS production expert) since the EDCO packets are now required primarily as a buffer stock for government rural health facilities. (In fact, large quantities are reported to leak out of the Government system and appear in pharmacies and drug stores for sale.) Since the EDCO packets have to be purchased from Central Medical Stores at the discretion of health officers by debiting Upazilá

Health complex budgets, it is possible to imagine a sharp drop in demand if better quality NORP packets are made available to them for free in adequate quantities.

The above factors present a mixed picture, but suggest that EDCO could be a credible long-term source of packets from SMP if it were necessary (i.e., if no funding for a new production facility were available).

## 1.2 Gonoshasthya Pharmaceuticals as a Second Source

The potential problems of sourcing ORS for category b), the present private manufacturers of ORS, have been mentioned by Russell in his report based on experiences in Egypt. However, the manufacturers of the present market leader in low-cost packaged ORS, Gonoshasthya Pharmaceuticals (GPL) have stated their interest and willingness to supply SMP with ORS of the desired specification, at a price close to that negotiated with EDCO. The reason for this rather surprising offer, made verbally by Dr. Zafrullah Choudhury during a visit to GPL on February 2, appears to stem from their concern for seeing a recent investment in ORS production capacity go to waste if SMP succeeds in capturing most of the commercial market. Thus, from their perspective, the best alternative to having the ORS market to themselves would be to profitably use their excess capacity to supply SMP.

The practicality of this alternative for SMP cannot easily be assessed. Their excess ORS production capacity (over their current sales) is about 5 million 1/2-liter packets per year and will increase to at least twice that level if they do not cancel an order already placed for more equipment. They have gone to great lengths to assure excellent quality control and in fact take extraordinary measures in production to guarantee long shelf life of ORS.

There are two potential minor practical problems with GPL producing ORS for SMP. First, if present drug regulations prohibit one manufacturer from producing and/or selling the same product under more than one name, an official exemption might have to be obtained for production of the Orasaline brand packets. Second, the production machines would require a different foil layout from the Bosch machines at EDCO. (This latter would only be a problem if it became necessary for some reason to shift raw materials from one manufacturer to another.)

Given the probable technical feasibility of GPL as a supplier, the more subjective factors involved in such a decision can be stated as follows:

- Use of GPL as a supplier in addition to EDCO would add a desirable redundancy factor during the initial marketing period.
- A supply contract mutually benefitting GPL and SMP would enhance the development of a "generic" promotional strategy, and would also reduce any motive GPL has to see the SMP program fail.
- On the other hand, it is possible that GPL could turn out to be an unreliable partner for SMP, and their unpopularity with some local pharmaceutical distributors could be a liability if GPL were associated with the program.

This recent interest on the part of GPL to supply ORS to SMP does present an interesting possibility for accelerating the pace of the marketing program. A significant logistical constraint on the program is that of product supply through early 1988 (a reasonable estimate of when SMP's own production could start). The SMP initial marketing plan is limited in scope by the supply bottleneck represented by EDCO's position as the sole interim source and their limited capacity. One million packets per year appears to be well below what could be moved through SMP's ethical channels, and might not allow a serious test to be conducted of the network of smaller outlets which will eventually distribute the bulk of SMP packets.

One way of providing a higher level of interim supply would be to persuade EDCO to increase their capacity or extend their shift, as mentioned earlier. This could

require SMP providing some production equipment, a possibility discussed in the SMP Proposal of June 1985, part of the Cooperative Agreement.

Another way, involving less financial risk and having significant potential benefit, is to simply contract immediately with GPL for one to two million packets, with terms of payment, product quality, dates of delivery, etc., all specified. Successful completion of the contract would not imply any ongoing commitment, but would result in a much-needed demonstration of good will by and to both parties.

The worst consequence of failure to deliver the product would be a change in SMP's marketing plans (which must remain flexible in any event since even EDCO's delivery dates are subject to events beyond their control), and could also confirm the need for an independent SMP production facility. What makes it reasonable to consider an advance bulk order is the extended shelf life (at least 4 years) of citrate ORS when properly packed in aluminum foil. Assuming adequate storage space and funds for purchasing inventory, there is no obvious drawback to this scheme.

### 1.3 Rationale for Production by SMP

Given the above possibilities, there would not seem to be an extremely strong rationale for an investment in a new ORS production facility until all possibilities of arriving at a satisfactory arrangement with EDCO and/or GPL has been eliminated. As mentioned earlier, the fact that the proposed facility would be a single-product plant is unattractive from an economic point of view, and, in fact, there is no precedent for such a large investment in ORS production in the developing world. Most facilities have been added onto existing pharmaceutical or other processing factories and done so at a rather more modest level of expense. This fact alone would weigh heavily against the decision if it were the case that capital was scarce and there were more productive or socially beneficial uses for it.

The best way to overcome this objection is to plan the new facility as a multi-purpose plant so that major economies can be realized. Fortunately, SMP have given this serious thought as part of their overall long-term

corporate planning. SMP's present facilities are rapidly becoming overcrowded and were of a makeshift character to begin with. When the projected level of activity associated with the contraceptive social marketing product is combined with possible new activities, the need for a new, consolidated SMP facility is manifest. These activities and their space requirements have been described in their recent proposal for purchase of land (attached).

An unfortunate aspect of the present situation is that the current design by TESCON of the ORS production facility will not be very useful if a multi-use structure is to be built, and it would be wiser to start all over with a new design allowing for the integrated production of ORS, condom repackaging and the potential for other pharmaceutical production, and include adequate godown space for raw materials and finished goods, administrative offices, staff facilities, garage, and all other functional buildings that these functionally related activities demand. The ORS production facility could be completed first, but it is obviously necessary to have full engineering and architectural plans for the entire complex before the project starts.

#### 1.4 Make or Buy: A Risk-Minimizing Strategy

"Should an ORS production facility be set up?" (Terms of Reference for PRITECH)

All development projects entail relatively high risk of failure, and while the SMP ORS project has been based on such extensive research that the chances of achieving its mortality reduction objectives are probably greater than most sectoral projects, it nevertheless runs a similar risk of failure that any other commercial marketing venture would.

It is understandable that an agency under pressure to commit grant funds cannot be as concerned with risks as, say, a lending institution. The present consultancy cannot directly answer the question posed in the terms of reference, but taking into account USAID's concerns about local production and reliability of supply for SMP, can suggest a strategy for answering the question which will minimize risks. The risks are of two types:

- Risk of failure to achieve predicted sales levels, making the high expenditure and a production plant a poor investment.
- Risk of successful competition with existing private manufacturers leading to objections to the capital and promotional subsidies, resulting in pressures to cancel or attenuate the project.

The first risk can only be eliminated by knowing with full certainty that enough ORS can be sold to have the desired significant effect on child mortality. Existing market research and test marketing efforts to date have only demonstrated a certain potential for sales through ethical channels, although past SMP performance indicates a high probability of satisfying whatever demand exists and can be generated for the product. However, the actual total demand through all channels can only be a subject of educated guesswork until a true trial is carried out, with the packets being made available in a sample of SMP outlets, at the proposed price, with typical modes and intensities of promotion focused at the trial areas. It is expected that this could be an early component of the marketing plan now being developed, if this approach to the production decision is adopted.

The second type of risk is only likely to materialize as a serious threat to the success to the project if the investments made by other manufacturers are rendered losses by SMP's success. Quite aside from the enormous resources available to SMP for distribution of its ORS brand and for promotion, the fact remains that a capital investment can be regarded as a subsidy. This is a matter which is readily ignored in most public-sector development-oriented projects, but can be controversial when the private sector is involved. To put this in perspective, if a private firm had to borrow Tk. 30 million to establish ORS production, the interest (18% to 20% locally) on the loan would add Tk. 1.20 to the cost of packet at a production level of 5 million per year. Amortization of the loan over 10 years would add around Tk. 0.60 more. Even if a more conservative investment were made, say Tk. 10 million, and production were raised to 15 million per year, a private sector manufacturer would have to add Tk. 0.20 in financing costs to their sales price. Thus, the risk of objection to subsidies can be minimized in two ways: by avoiding the situation of investing in a

new plant while available existing private sector capacity remains unused, and when the investment in a new SMP plant is made, by operating at close to the planned capacity so the apparent unit cost subsidy is kept low.

As it happens, only one local manufacturer, GPL, has invested heavily in ORS production and will have excess capacity if SMP succeeds in capturing a significant share of the market. A strategy which will simultaneously minimize both risks described above is:

- a. Proceed with SMP plans to acquire land, but redesign the proposed plant as a multi-purpose SMP facility with the potential for adding an ORS production area after construction begins. This will save Tk. 1.1 million per year in rents for SMP and reduce the direct investment in the ORS facility, if it is added on, by half to two-thirds through the sharing of many ancillary facilities.
- b. Modify the present marketing plan to include a well-designed test of ORS sales through the SMP OTC (non-pharmaceutical) outlets in a limited geographical area. It should be possible to finally obtain valid demand data and project the future product supply needs. This test should be done as soon as the permission needed to sell ORS as non-ethical product is obtained.
- c. Negotiate a single, closed-end supply contract with GPL for the quantity of packets needed (above that to be supplied by EDCO) to carry out the market test described above, plus a buffer stock calculated to fill the predicted pipeline until the next stocks are received either from SMP production or EDCO.
- d. On the basis of medium-term demand estimated from the mass market test, and supplier (EDCO/GPL) performance and willingness to continue to supply at a satisfactory price, decide whether or not to order production equipment for the SMP facility. This decision could be made as construction of the multi-use plant nears completion, so equipment could be installed in a timely manner. The alternative, if demand proves relatively low and local suppliers reliable, would be to negotiate long-term local procurement contracts.

## 1.5 Technical Commentary on the TESCON Feasibility Study

The following remarks about the technical proposal submitted by TESCON will also be useful when the production facility is re-designed:

- a. The floor space allocated to ORS packet filling, 200 sft, is grossly inadequate for the production level and equipment specified. This should be increased to a minimum of 450 sft to accommodate future expansion without having to construct a new room.
- b. The climatically-controlled production areas (mixing and filling) should have lowered ceilings (9 to 10 feet at most, rather than 12), and the ceilings, if not the walls, should be well-insulated so climate control can be achieved with minimum energy cost. If windows are installed they should be small.
- c. The proposal does not indicate how the air-conditioning requirements were calculated. There may be some need to have the equipment specifications reviewed.
- d. Nor has a calculation been shown for the needed size of the two godown areas. These follow logically from the expected production levels, buffer stock of materials, and material re-order interval. The new WHO ORS production manual contains a useful guide to calculating the requirements, including the design of shelving and pallet racks. It is all too easy to underestimate storage space for the bulky ORS materials.
- e. Some of the equipment specified should be reviewed by experts before any orders are placed. There is no justification for a V-type mixer when one or two much less costly drum-hoop mixers will serve better. For grinding caked salts, alternatives to the Fitzmill specified should be seriously considered: it is expensive, difficult to clean, and generates vast amounts of dust. A rotary grater or even manual pulverisation would be the better choice. Finally, the need for an incinerator

is not apparent since there is little waste in the production process and most containers that materials are shipped in can be recycled. The use of air curtains is highly questionable also.

f. The choice of the most important machine is critical, but it is by no means obvious which make or type sachet filling/sealing machine will be best for this facility. Some of the considerations involved in this choice are:

- The use of a semi-automatic filler-sealer such as the UNICEF/Rovema prototype has much to recommend it. It is slower and involves more labor per packet, but it promises less down-time, and offers a flexibility of choice of packaging material that automatic machines cannot.
- To attain the high production levels anticipated for SMP's needs, automatic machinery will ultimately be a necessity, although this statement might be difficult to justify if not for the fairly good experience with this type of equipment in Bangladesh. If good climate control, spare parts, a steady electricity supply, and skilled maintenance technicians are available, there is little to be apprehensive of. The choice between manufacturers will be difficult though. If the Rovema prototype semi-automatic machines are also used, the Rovema S90 or S110 would be logical choices in terms of maintenance, and have been very successful in ORS production in other tropical countries. EDCO have had good experience with their Bosch machine with both slide-doser and auger-doser attachments. The vertical Siebler and Merz machines have also acquitted themselves well in this country, but would be a poorer choice for reasons of production strategy as mentioned below. There are also competent and inexpensive machines available from India. The particular machine specified in the TESCON proposal, by Uhlmann, is a vertical machine and not as rugged and reliable as the others mentioned.

- If it is not possible to obtain a waiver for the requirement to buy a U.S.-made machine, there are some suitable types available, although there is little ORS production track record to justify any one U. S. make.
- g. Unless there is a firm need to commit funds to purchase all the ORS production equipment at once, the following approach might be adopted to minimize risks of production delays or failures due to selection of unsuitable machines:

First: Make a final decision on packaging material. It is probably a bad idea to switch to polyethylene after foil packets have been test-marketed extensively, unless there are overwhelming advantages perceived in providing a large package insert, as has been done in Sri Lanka. (See the WHO Production Manual.) The cost of the aluminum foil laminate from Korea used in Bangladesh is quite reasonable by world standards (\$42/100 m<sup>2</sup>) and could be even cheaper if the minimum grade approved by WHO for the citrate ORS (24.1 gm/m<sup>2</sup> aluminum layer) is used. With polyethylene there is no possibility of production on automatic machinery, and cost savings would be insignificant.

Second: If aluminum foil is selected, initially install one semi-automatic line and one automatic machine. This will provide an initial capacity of 5.5 million per year (conservatively, based on 20 and 40 packets per minute, respectively). The automatic machine can also be used to pre-form empty foil packets at high speed, perhaps working an extra 2 hours per day, with its filling function disabled. The empty foil bags will be used with the semi-automatic line. Thus, the automatic machine can be useful even if its filling function is disabled. (Note-only horizontal machines, such as Bosch and Rovema, can conveniently be used to produce open packets.) In the event of total disablement of the automatic machine, the bags could possibly be produced by arrangement with EDCO, since the same width foil would be used on their machines.

Third: The performance of the automatic machine initially selected would be evaluated, and also compared to the semi-automatic setup, and orders for other

or different machines could be placed after several months of operation. It should be borne in mind that the maximum speed ratings of all manufacturers are not to be taken seriously for ORS, which is a non-free-flowing and dusty product. Operation at half to two-thirds maximum speed enhances packet quality, extends machine life, and reduces down-time for cleaning and repairs.

- h. Perhaps even more so than for a commercial manufacturer, quality of the SMP ORS product must be rigidly maintained. If the WHO guidelines are followed rigidly, quality will be assured, but these can be considered conservative especially with regard to testing incoming raw materials. Nevertheless, it is good policy to be beyond reproach, by having proper equipment for Q.C., and more importantly by having confidence in the competence of the responsible workers. It is suggested that Q.C. staff be trained by an apprenticeship at EDCO well in advance of production startup, and that EDCO be retained as a backup laboratory for an extended period of time to double-check all results.
- i. The last point concerns raw materials. Anhydrous glucose is the costliest component of ORS, but it is inadvisable to purchase the cheapest available product, even if it carries a B.P./U.S.P. or parenteral grade. There is a great difference between the physical properties and hence the flowability of different manufacturers. Low bulk density can also be a serious problem. Manufacturing problems will be minimized by finding a suitable manufacturer and staying with it. Moisture content on arrival is also important since drying glucose can be costly and time-consuming.

## 2.0 Potential Project Constraints

The present status of the ORS marketing project, apart from the supply questions discussed in the previous section, can be summarized briefly:

### 2.1 Marketing

The necessity of switching from imported packets (from Ciba-Geigy) to a locally produced product was indeed a setback

to the project, but one which ultimately must be regarded as extremely fortuitous. The (non-subsidized) price at which the imported packets would have had to be marketed at, Tk. 3.50, was found to be marginally acceptable to retailers and consumers, whereas a much more attractive retail price of Tk. 2.00 has now been requested for the EDCO - produced Orasaline packets. The use of other local sources, as well as the potential SMP production facility, should similarly allow a Tk. 2.00 retail price.

The test marketing of the Ciba-Geigy ORS was not really intended to be a rigorous test since no comparison of price, name, package, or promotional tactics was made. The only logical conclusion that can be drawn from the marketing "test" to date is that a demand for some 20,000 imported packets per month priced at Tk. 3.50 exists through ethical channels with hardly any trade promotion. That is to say, very little of practical use has been learned.

SMP staff are well aware of this fact, and are at the moment designing a comprehensive marketing plan with the help of their subcontractor, Manoff International, that takes into account the new product, price and package design. It will also incorporate what has been learned about consumer attitudes and behavior from the marketing, anthropological, and consumer behavior studies performed in 1985. Since most of the major marketing variables (price, package, name, outlets, sales force, etc.) have already been tentatively fixed, and considering the large body of information already existing, it will be in the best interest of the project to conduct a very brief review of the marketing plan and quickly obtain approval for implementing it. Regardless of what information gaps are still perceived to exist, it is doubtful that very many health product launches have been accompanied by such an intensive preparatory effort.

Only two small recommendations seem necessary here to possibly further reduce the risk which naturally accompanies marketing a product requiring behavioral change.

First: A forthcoming evaluation of the BRAC Project will contain data on reasons for non-usage of ORT by the 60 to 70 percent of mothers who already know about it. SMP should try to integrate this information in its marketing plan, and quite possibly some of the more generous estimates of the ORS "demand gap" can be modified accordingly.

Second: if the risk-minimizing strategy for ORS supply described in the preceding section is adopted, an appropriate market test of the eventual distribution chain should be incorporated into the plan now under design. The marketing expert from Manoff, Dan Lissance, believes this may be possible to do.

## 2.2 Advertising

There is concern over the possibility of ORS sales not reaching the stated goals if the BDG continues to apply its restrictions on mass media brand advertising for pharmaceutical products. SMP intends to address this possible constraint in two ways.

The media advertising plan, which in itself is only one component of the promotional strategy, will initially restrict brand-name promotion of Orasaline to the professional media, where such promotion is allowed. Concurrent with the sensitization of practitioners and pharmacists to the advantages of ORT and the qualities of Orasaline, a mass media campaign will commence, aimed at informing the public about the need to treat diarrhea with ORT, either home solutions or packaged ORS.

By this time, it should have a clear indication on the BDG's attitudes toward making an exception to the brand advertising restriction, and explicitly allowing ORS to be sold as general merchandise. If permission continues to be withheld for the former, the campaign will promote ORS packets in a generic manner, and inform the public of their general availability and advantages.

At the same time, without asking explicitly for permission, some mass media brand advertising will be purchased to assess the degree and nature of the official objections.

There is reason to be hopeful of the ultimate approval, de facto or unofficial, of brand advertising. Some significant precedents exist, notably for oral contraceptives, and recently print advertisements for a general product sold in pharmacies (disinfectant) have appeared. In addition, WHO CDD Program Director, Dr. Michael Merson, has offered to make a personal appeal to the BDG authorities on behalf of this case.

The worst situation, if the SMP brand name cannot be presented in mass media, would probably not be a serious constraint at all. If a product is needed, actively promoted, and made widely available at an affordable price, then generic advertising can in principle sell as much product as brand advertising. The skeptic might ask if fewer people would brush their teeth if there were no brand advertising for toothpaste. In any case, SMP has ample experience using other promotional media in which the Orasaline name could be promoted to supplement the level of brand name recognition, should it prove to be a limiting factor on sales.

### 2.3 Pricing and Competition Issues

Concerns voiced on many sides about SMP ORS pricing, its effect on other private sector producers, its effect on use of home-prepared ORT, and its effect on the ORT efforts of other donors, are all legitimate ones.

The question of affordability of packaged ORS has been studied through price surveys by SMP, although the related question of prices of the alternatives to ORT such as the anti-diarrheal drugs remaining on the market, or traditional cures, were not thoroughly examined.

There is general agreement that if SMP markets ORS, the retail price should not be subsidized as are its contraceptive products. This reflects a concern for fairness to other manufacturers and is a pre-condition for project approval on the part of the Commerce Secretary, Mr. Gholam Mustafa.

Supporters of SMP's strategy and philosophy believe that the social objectives of the project can be achieved by pricing ORS packets at a level that does not require any direct subsidy, but it is also understood and accepted by the concerned parties that promotional activities will be financed by a grant which will not be reflected in the price of the product. Similarly, there is little objection to the subsidization of the capital cost of a possible production facility, the notable exception coming from GPL, which has financed its new ORS facility, but has itself received capital grants in other areas.

With this in mind, it becomes possible to analyze the economics of competition between the SMP ORS product

and hypothetical private producers who will position their ORS product at the low end of the price scale to target the mass market of the lowest SES groups. The table on the following page compares the production costs, maximum retail prices, likely retail prices, other costs, and profit margins of SMP and two competitors.

Private competitor "A" wants to reach the low-price market but has a small capacity, so tries to maximize profits by setting a slightly higher retail price than his competition. Competitor "B" adopts a strategy of maintaining a large market share in face of SMP competition so he can use his large production capacity efficiently, and hence sets his retail price equal to SMP. "B"'s situation is different from "A"'s in another way, in that part of the capital investment for his plant was raised without cost, and as with SMP financing costs do not play as large a part in his profitability picture.

As shown in lines a, b and c, direct manufacturing costs are assumed equal for all three producers, based on the likelihood that all buy materials from the same sources, use labor efficiently, and pay the same factory wage rates.

Differences appear in factory overhead (line d). Here the SMP factory will have higher costs because they are distributed over a smaller product range and value. The competitor "A" is assumed to overstate his factory overhead because it is easy to do so, in order to increase the basis for Maximum Retail Price. A true figure is shown for "B", who has no such motive.

Real, significant differences also appear for depreciation (line e) because the SMP operation must depreciate a large investment in buildings and new equipment, while "B" and "A" have started ORS production in existing plants and can utilize some equipment from their tablet production lines and quality control laboratories.

Costs on lines a through e are added to form the basis for the MRP, half of which is shown on line f. (Note: there is some disagreement as to this MRP basis which could not be immediately resolved. SMP's General Manager believes the MRP basis is correct as shown.)

To determine actual ex-factory costs, administrative overheads and financing costs are added (lines g and h).

Unit cost (at 5 million per year)	SMP (1)	Private Mfr. "A"	Private Mfr. "B"
a) Direct materials	Tk. 0.375	Tk. 0.375	Tk. 0.375
b) Packaging materials	0.247	0.247	0.247
c) Factory labor	0.234	0.234	0.234
d) Factory overheads	0.103	0.100 (2)	0.050
e) Depreciation	0.193	0.066 (3)	0.066 (3)
<hr/>			
f) MRP basis (x 2)	1.152	1.022	0.972
<hr/>			
g) Administrative overheads	0.085	0.050	0.030
h) Financing costs	- 0 -	0.099(4)	0.050 (5)
<hr/>			
i) Actual ex-factory cost	1.237	1.121 (6)	1.052
j) Selling expenses	0.563	0.200	0.200
k) Excise tax	0.200	0.200	0.200
<hr/>			
l) Total costs	2.000	1.521	1.452
<hr/>			
m) Maximum Retail Price	2.35	2.05	1.95
n) Likely retail price	2.00	2.05	1.85
<hr/>			
o) Manufacturer's profit	- 0 -	0.53	0.40
(line n minus line l)			
<hr/>			

NOTES:

- 1) From TESCON study, except selling cost changed
- 2) Double the actual overhead of Tk. 0.050
- 3) On basis of cost of equipment of Tk. 3.3 million, 10 years
- 4) Tk. 3.3 million at 15% interest.
- 5) Tk. 1.6 million at 15% interest.
- 6) Using true factory overhead.

Again, SMP is assumed to have the highest administrative costs associated with the ORS product because of the low volume, "A" having the next highest costs due to private sector emoluments, and "B" the lowest. Note that the total ex-factory cost for SMP is also very close to the Tk. 1.30 price paid to EDCO for the interim supply.

Selling expenses are high for SMP because of the high coverage targets and small number of SMP products. "A" and "B" may even cut back their selling expenses because of the "generic" nature of SMP promotional activities. Excise tax is assumed to be the same for all three products.

Total costs for the three products (line 1) can now be compared, with SMP's being significantly higher than either of the competitors.

Based on the presumed market strategies of the three competitors, the retail prices of the three products set by the manufacturers can be guessed at. SMP wants to maintain a minimum price level but has a mandate to cover all its direct costs, so sets the retail price, line n, equal to its total product cost, Tk. 2.00, considerably below the possible MRP based on its direct production costs. "A" sets his price at the MRP of Tk. 2.05, while "B" sets his price slightly below his MRP in order to compete pricewise with SMP's product, at Tk. 1.85. The bottom line shows that while SMP breaks even, "A" earns a profit of Tk. 0.53/packet (26% on sales) and "B" earns Tk. 0.40 packet (27% on sales).

If the assumptions here are not too far from reality, neither manufacturer could claim that SMP's marketing and pricing policies are detrimental to their financial well-being. Furthermore, as the SMP ORS becomes more intensively promoted through the most peripheral outlets, it could decide to relax its effort in the urban pharmacies and drug stores that are the major outlets for "A" and "B" and let them have a larger market share there.

#### 2.4 Other Donors' Concerns

USAID is sensitive to the concerns and possible objections of the other major donors and participants in ORT in Bangladesh. Meetings with all the identified

parties (except for N.O.R.P. and Ford foundation) suggest that no serious problems exist in this regard. A summary of the points raised follows:

UNICEF (Nancy Terreri): Concern over possible financial damage to private sector manufacturers, apparently communicated via mutual international benefactors of UNICEF and GPL, as a result of subsidized mass marketing of ORS. Assured by plans to set the retail price of ORS to cover costs, she does not regard either grant funding of promotional activities or of capital investment in production facilities as an anti-competitive subsidy.

Gonoshasthya Pharmaceutical Laboratory (Dr. Zafrullah Chowdhury): As mentioned earlier, he is concerned about maintaining their market share and not having a sizable investment in expanded production go to waste. He regards a grant of capital investment as an unfair subsidy. Interested in producing for SMP to avoid unutilized capacity.

ICDDR/B (Dr. M. G. Rowland): Does not recognize any problem with commercial competition per se but voiced a weak "aesthetic" concern about commercialization of ORT. Agrees that lobon-gur cannot be a universal method since it is not as universally available or as cheap as thought.

B.R.A.C. (Mr. Abed): No objection to social marketing ORS at a low but commercial price. Interested in producing packets at BRAC.

## 2.5 Evaluation Issues

An overall USAID evaluation of the SMP project was started as this consultancy was ending. During discussions while these two activities overlapped, the complexity and difficulty of evaluating such a project became painfully obvious.

Assessing the impact on mortality due to improved ORS distribution by SMP will be a formidable task due to widespread knowledge and use of home rehydration solutions. Even obtaining reliable information about

ORS sales could be a problem once distribution beyond the ethical channels becomes significant.

Jerry Russell provided some suggestions about evaluation which had been useful in the Egypt program. Not being able to fully explore this question during this consultancy, it is necessary to strongly recommend that the project design should incorporate a properly-designed, built-in evaluation component which includes a statistically sound direct or indirect assessment of the project's impact on child mortality and periodic distribution audits.

ADDENDA

ASSGN. NO: SS 115

SOW: Bangladesh

CONSULTANT: Stephen Fabricant

Assess current plans for production, distribution and sale of ORS in Bangladesh through the PSI Social Marketing Program, with special attention to the following questions:

- Should a production facility be set up to supply ORS for the program? Initially the BOG Central Drug Agency will supply ORS packets.
- How should a price be established, without detriment to markets for other ORS products?
- How would a subsidy of PSI's ORS product affect for other ORS products?
- Since the government does not allow advertising of medical products by brand-name, how will the PSI program advertise their ORS product?

Based upon discussions in Dhaka with the MOH and donor agencies as well as other organizations, produce a report of findings, issues and recommended actions. Report to be submitted to PRITECH by 15 February 1986.

## DRAFT PROPOSAL FOR THE PURCHASE OF LAND FOR SMP

### BACKGROUND

The Family Planning Social Marketing Project was started in Bangladesh in 1975 by Population Services International, a world wide private non-profit organization, under contract with USAID and agreement with the Government of Bangladesh. Policy guidance and overall responsibility for the operation are provided by a Project Council Chaired by Secretary, Ministry of Health & Population Control, Government of Bangladesh. The SMP began national sales of contraceptives in 1976 and has now built up an extensive marketing organization through out Bangladesh.

Acute diarrhoeal diseases are one of the leading causes of mortality in infants and young children in many developing countries including Bangladesh. In most cases, death is caused by dehydration. Dehydration from diarrhoea can be prevented by giving extra fluid at home, or it can be treated simply, effectively, and cheaply in all age groups by giving patients by mouth an adequate glucose - electrolyte solution which is commonly known as Oral Rehydration Salt (ORS). Government in collaboration with WHO, UNICEF Voluntary Organization is taking all possible measures to combat diarrhoea. It is felt that SMP can amplify and complement Government's efforts in the supply of ORS packets and in the education and motivation of the public. Accordingly, the Project Council asked SMP to arrange for local production and marketing of ORS. The Ministry of Health and Population Control, Government of Bangladesh gave approval of the project for the manufacture of ORS vide their letter Ref no. PC/S-2(Cord)/100/83/209 dated 29 July, 1985. SMP engaged Technical Services and Consultants Ltd. (TESCON) to conduct a feasibility study on ORS manufacturing plant and prepare a feasibility report on establishing an ORS manufacturing plant. Accordingly to TESCON's report

submitted recently the ORS project has been found technically and financially feasible.

Sales of ORS in conjunction with contraceptives being sold by SMP was proposed for several years and several test markets were conducted. It showed a strong demand for the product which had greater retailers acceptance than contraceptives. It is also believed that the ORS product will help get the contraceptive products into even more retail outlets, as well as being a highly useful health products.

REQUIREMENTS FOR LAND :

At present SMP is paying monthly rents for three hired premises in Dhaka, for their contraceptive operation as detailed below :

<u>Purpose</u>	<u>Area</u>	<u>Monthly rent</u>
1. Transport Office (including workshop, garage & warehouse)	9,000 sft. (Covered)	Tk. 34,000/-
	8,000 sft. (open space)	
2. Warehouse (including repackaging of contraceptives)	11,500 sft.	Tk. 36,000/-
3. Head Office	12,000 sft.	Tk. 26,000/-
TOTAL :	32,500 sft. (Covered)	Tk. 96,000/-
	8,000 sft.(open space)	
Grand Total	<u>40,500 sft.</u>	

The present rented space is now totally insufficient for SMP requirements. In view of the non-availability of suitable large space and prevailing high rent, we are somehow carrying on. Further all these establishments are in Dhanmondi Residential Area. It is improper to conduct

commercial or quasi commercial activities like warehousing repackaging & storing, etc. in Dhanmondi Residential Area. In 5 years' time the sale of contraceptives is expected to go up by atleast 60% for which also SMP need larger space as noted below :

<u>Purpose</u>	<u>Area</u>
1. Transport office (including workshop and garage)	20,000 sft.
2. Warehouse (including Repackaging of contraceptives)	30,000 sft.
3. Head Office	20,000 sft.
Total :	<u>70,000 sft.</u>

At present the average rent paid is about Tk. 3/- per sft. This is quite low in view of occupying these premises for long. The rate at which the rent is increasing, it will be about Tk. 6/- per sft. in 5 years' time. So far 70,000 sft. about Tk. 4,20,000/- will be required to be paid as rent alone per month.

Considering the prevalence of diarrhoea and the local production of ORS (including expansion programme) and home-made laban-gur solution, there is a demand gap of more than 50 million 500 cc sachets of ORS a year./ However it has been decided to put up an CRS plant for manufacturing 15 million sachets per annum on single shift basis initially. TESCON have suggested to acquire 1 acre (3 Bighas) of developed land in or around the metropolitan city of Dhaka for constructing ORS Factory of 10,000 sft.

METHOD OF SELECTION :

In order to purchase a suitable piece of land, a land purchase committee was formed in July 1985 consisting of the following :

- |    |                                       |                  |
|----|---------------------------------------|------------------|
| 1. | Mr. S. Anwar Ali, General Manager     | Chairman         |
| 2. | Mr. Shahadat Ahamed, Finance Manager  | Member           |
| 3. | Mr. A.A.M. Anwar, Development Manager | Member           |
| 4. | Mr. K.A. Ahmed, Personnel Manager     | Member/Secretary |

/ which is likely to increase to 100 million sachets a year by 1990

After the appointment of Mr. Amjad Ali as ORS Project Manager, his name was included in the Committee and he was made Secretary of this Committee in place of Mr. K.A. Ahmed. Several advertisements were inserted in the local dailies in July, 1985 to obtain offer for a suitable piece of land from prospective buyers. From amongst the offer initially 9 plots were provisionally selected and then finally 3 plots as detailed below in order of preference.

1. 1 Acre at Tejgaon Industrial Area owned by Bengal Laboratories Ltd.
2. 2 Acres (corner plot) on the eastern fringe of Tejgaon Industrial Area besides the holding of Dhaka Optical Company.
3. 2 Acres at Mirpur Industrial Area (Opposite Bangladesh Insulator Company) owned by a Cooperative Society of 29 workers of K. F. Rubber Industries.

All the above 3 plots were finally approved after the visit of these plots on 19 August 1985 by all the members of Selection Committee including General Manager and also by Mr. William P. Schellstede, President, Population Services International. All the three are Government allotted plots. So the possibility of any complications regarding title is remote and hence Government plots are always preferred. On the request of SMP, the owners of plot no. 1 and 3 provided SMP's lawyers H & H Company with the necessary deeds and documents but the owners of plot no. 2 failed. While the lawyers were examining the documents, negotiations were started with the owners of these two plots. As the prices demanded by owner of Plot no. 1 was quite high and there were many complications involved in the purchase of land owned by a Cooperative Society, fresh advertisements were inserted in the local dailies in November 1985 but surprisingly there were no offer.

Bengal Laboratories, Dhaka's initial offer dated 12 November 1985 for 1 acre plot at Tejgaon was Tk. 12,400,000 against which <sup>SMP</sup> submitted an offer of Tk. 5 million. On negotiations Bengal Laboratories reduced their offer to 9.6 million on 27 November 1985 against which SMP made an

offer of Tk. 8 million. Bengal Laboratories after considering our offer for some time have now expressed their inability to accept our offer. It seems they will not be agreeable to sell the plot of land for less than Tk. 9 million. So the total cost for this plot of land will be about Tk. 12 million.

Negotiations were simultaneously continued with the owners of Mirpur Plot. They offered 2 acre land @ Tk. 3 million per acre (10 lakhs/bigha) excluding all charges such as gain tax, transfer charges, registration cost etc. payable by the buyer. The total cost for this plot works out to about Tk. 10 million. This plot is preferred as the price is cheaper, size is larger to meet present and future requirements and being situated at the outskirts of the city and not in the main industrial areas, working conditions will be better. But the following are the main problems:

1. This land being owned by a Cooperative Society can be transferred or sold only to a member or another Cooperative Society. So <sup>SMP</sup> asked the members to obtain permission from the Cooperative Department of Government of Bangladesh to sell the land to <sup>SMP</sup> and they are taking necessary action.
2. The whole plot of land has been divided among the 29 members of the Society who are not only residing in this area but also have let out to others. They being poor people find it difficult to settle elsewhere without our paying them any advance. SMP on the other hand insisted on getting vacant possession of the land before making any advance. They are looking into this matter also.

The members of the Cooperative Society are very keen in selling their plot of land. They have already approached the Cooperative Department for permission for selling the plot of land to SMP. In view of the various formalities involved, they will be required to spend some money, time and energy, Before they do it they have asked SMP to give them a letter of intent. In all fairness a letter of intent may be issued giving a time limit but without any financial

involvement of SMP. The total cost for this plot will be Tk. 9 million including all charges.

Meanwhile an offer has been received on behalf of the proprietor of Kamal Press for a 2/3rd Acre plot (2 Bighas) of land in Tejgaon Industrial Area at Tk. 2.6 million inclusive of all charges but excluding Registration fees. The total cost will be Tk. 3 million. This is also a Government allotted plot and the price also is very attractive but the main disadvantages are (1) The plot is small (2) Location is not good. This plot if purchased may be utilized for repackaging, warehouse, garage and workshop and also for ORS factory but the Head Office has to be set up in another location. Fortunately an offer has been received for a plot of land measuring about 1/3 Acre ( 1 Bigha ) with a house on road no. 27, Dhanmondi R. A. The total cost including all charges will be Tk. 9 million. This is a good plot for Head Office. The building is situated on one side. So a new building for the Head Office may be constructed leaving the old building as it is for the time being. Later on another building may be constructed or an extension of the new building may be made after demolishing the old building. The total cost of the 2 Bigha plot in Tejgaon and 1 Bigha Dhanmondi plot on Road no. 27 works out to Tk. 12 million which is the same as the price of the plot of land owned by Bengal Laboratories in Tejgaon Industrial Area.

Law and order situation particularly in Tejgaon and Tongi Industrial Areas is not good. Strikes, demonstrations, processions, stoppage of work etc. are common phenomena in these areas. It may not, therefore, be advisable to have both Head Office and factory in the same premise in these areas. In that case two Bigha plot in Tejgaon together with 1 Bigha plot in Dhanmondi seems to be a better choice.

.... 7

Cost and Source of fund :

The following options are being pursued :

1. Mirpur plot owned by Cooperative Society-Area; Area 2 Acres; Total cost Tk. 10 million; Suitable for workshop, garage, warehouse, repackaging, CRS factory and Head Office; Ample scope for future expansion; Limiting factors — Obtaining permission from the Government to sell the plot and giving vacant possession by 29 members of the Society.
- 2(a) Tejgaon Industrial Area plot owned by Bengal Laboratories; Area 1 Acre; Total cost Tk. 12 million; Suitable for workshop, garage, warehouse, repackaging, ORS factory; Head office may also be located and in that case scope for future extension is limited; Readily available after compiling the usual formalities for registration.
- 3(a) Tejgaon Industrial Area plot owned by Proprietor of Kamal Press; Area 2/3rd Acre; Cost Tk. 3 million. Suitable for workshop, garage, warehouse, repackaging, ORS factory but not suitable for Head office. Scope for future expansion is limited; Readily available after compiling the usual formalities for registration.
- (b) Plot on Road no. 27 Dhanmondi Residential Area; Area 1 Bigha with a house; Total cost Tk. 9 million. Suitable for Head Office only. Readily available after compiling the usual formalities for registration.

In our frantic effort to have a suitable plot of land, SMP again inserted advertisements in The Bangladesh Observer on 17 January and in The Ittefaq on 18 January 1986. This time SMP received some offer, but all for outside Dhaka — in Savar, Tongi, Joydevpur, beyond Kanchpur Bridge towards Narsingdi etc. If for any reason, purchase deed cannot be registered for any of the three plots noted above then SMP will have to seriously consider purchasing a plot of land outside Dhaka as there is really no other plot available for sale in or around Dhaka City.

So whichever plot is purchased the cost will be about Tk. 10-12 million. For some years SMP has been contemplating to have its own facilities for contraceptive operation long before considering ORS Project. Therefore they have been saving and accumulating a part of their revenue earning which now stands <sup>at</sup> about Tk. 10 million. The cost of land is proposed to be met from the contraceptive income in Taka.

Based on the prevailing cost of building materials and labour, cost of Transport Office and Warehouse will be about Tk. 400/- per sq.ft. and Factory and Head Office building will be about Tk. 500/- per sq.ft. So the total cost for factory and other buildings will be as under :

	<u>Plinth area</u>	<u>Cost in Tk.</u>
Transport Office (including workshop and garage)	20,000 sq.ft.	8,000,000/-
Warehouse (including repackaging)	30,000 sq.ft.	15,000,000/-
Head Office	20,000 sq.ft.	10,000,000/-
Sub-total :	<u>70,000 sq.ft.</u>	<u>33,000,000/-</u>
Factory Building	10,000 sq.ft.	5,000,000/-
Grand total:	<u>80,000 sq.ft.</u>	<u>38,000,000/-</u>

The cost of buildings can also be met from the Revenue Fund. As it will take at least 12-<sup>18</sup> months for the completion of the entire work by which time SMP expect to have more revenue earning, SMP foresee no problem in meeting the total cost from the Revenue Fund.

Incidentally the cost of the plant, machinery and equipment will be about Tk. 22.5 million which will be met from the allocated funds for ORS.

## CONCLUSION :

SMP has been contemplating for some years to have its own facilities for the present contraceptive operation long before considering ORS Project. Accordingly, sales revenue was accumulated over the past 2/3 years to build our repackaging, warehousing and Head Office facilities. The present working place is not suitable and the rent is quite high. With the increase in operation even for contraceptive alone, SMP will require larger and better place for smooth functioning. Such places are not at all available and considerably high rent has to be paid for unsatisfactory accommodation. Now that the Project Council has approved a proposal to put up an ORS factory, it has become all the more necessary to have a piece of land for factory, repackaging & other activities and also for Head Office, depending on the location.

In future it may be possible to add other production facilities in this premise. Foremost would be a condom local repackaging unit in 3/5 year's time which would envisage receiving condoms in bulk (instead of prepackaged as at present) and repackaging it in foils, packets and dispensers locally. When condom sales reach 150 million pieces a year, costing about US\$ 10 million a year, such a repackaging operation could well result in savings of US\$ 1-1.5 million a year. SMP may also consider production of water purification Tablets or Vitamin Tablets or any other socially desirable goods in future if approved by Government. Suitable land and factory are prerequisite for these operations. However, full feasibility studies have to be undertaken in the coming years before these plans can be implemented.

Considering all these it has become absolutely necessary to have a piece of land for warehousing, repackaging, garage, workshop, ORS factory and also for Head Office depending on the location. It will take at least 12/18 months after the

purchase of land to complete building and factory construction and start the production of ORS. Approval of the Project Council is now necessary for buying at a cost of Tk. 12 million any of these plots noted above failing which any other suitable plot of land even outside Dhaka city but within the sanction amount of Tk. 12 million. For the present, the registration will be made in the name of Family Planning Social Marketing Project. In future, as and when SMP is institutionalised, the land would be transferred to/taken over by the new institution.

After verifications of all documents by the lawyers and completion of negotiations, it is necessary to enter into a preliminary agreement (Baina nama) by paying an advance. Usually this has to be done quickly. Hence the approval of the Project Council is necessary before SMP finalise negotiations with the owners of these plots.

RECOMMENDATION :

It is strongly recommended that the Project Council approve the purchase of land at a total cost of Tk. 12 million, to be disbursed from the Revenue Funds at the earliest in order to commence implementation of ORS Project Proposal.

AA : mau

# FAMILY PLANNING SOCIAL MARKETING PROJECT



House No. 105, Road No. 9.A ; ( New )  
House No. 845, Road No. 19 ( Old )  
Dhanmondi R/A, Dacca, Bangladesh  
G. P. O. Box 690.  
Phones : 313951 315851 319824  
Cable : Popladesh

January 30, 1986

The Director General  
Department of Prices and Market Intelligence  
38, Purana Paltan Lane  
Dhaka

Sub : Fixation of MRP of "ORSaline" Oral Rehydration Salt

Dear Sir :

The Family Planning Social Marketing Project is a non-profit social marketing organization for selling contraceptives, Oral Rehydration Salts (ORS) Vitamins and other socially desirable goods and services. This was started in Bangladesh in 1975 by Population Services International (PSI), a worldwide non-profit organization under contract with USAID and agreement with the Government of Bangladesh. Policy guidance and overall responsibility for the operations are provided by a Project Council chaired by Secretary, Ministry of Health and Population Control.

After the successful marketing of contraceptives, the Project Council asked us to arrange for local production and marketing of ORS for the treatment of diarrhoeal disease which is by far the most important cause for the deaths particularly of the children in Bangladesh. The Ministry of Health and Population Control gave approval of the project for the manufacture of ORS vide their letter ref. no. PC/S-2(Coord)/100/83/209 dated 29 July 1985. We have just applied to the Director General, Department of Industries for Government approval for setting up an ORS plant for producing 15 million sachets a year. It will take at least 2 years before we are able to go into production. In the meantime, we have been asked to proceed with the marketing of ORS by obtaining supplies from Essential Drugs Company, a Government owned company at Dhaka. Accordingly, an order has already been placed with them for the supply of 1 million sachets of "ORSaline" (Our Brand name for Oral Rehydration Salt) @ Tk.1.30 per sachet of 13.95 gms ex-factory at Tejgaon, Dhaka inclusive of excise duty of 20 paisha on the basis of assumed MRP of

# FAMILY PLANNING SOCIAL MARKETING PROJECT



House No. 105, Road No. 9.A ; ( New )  
 House No. 846, Road No. 19 ( Old )  
 Dhanmondi R/A, Dacca, Bangladesh  
 G. P. O. Box 690.  
 Phones : 313951 315861 319824  
 Cable : Popladesh

Tk. 2.00 per sachet and conforming to WHO specifications as noted below :

	<u>Grams/½ litre</u>	<u>%</u>
Sodium Chloride BP ... ..	1.75	12.55
Potassium Chloride BP ... ..	0.75	10.39
Trisodium Citrate, dihydrate BP	1.45	5.38
Glucose, anhydrous BP ... ..	10.00	71.68
	<u>13.95</u>	<u>100.00</u>

Subject to your kind approval, we intend to sell "ORSaline" at the M.R.P. of Tk. 2.00 per sachet of 13.95 gms inclusive of excise duty of 20 paisha per sachet on the basis as detailed below :

A	Maximum Retail price (MRP) including excise duty	Tk. 2.00 per sachet
	Less : Excise duty 10% of MRP (A)	Tk. .20
		<u>          </u>
B	Maximum Retail Price (MRP) excluding excise duty	Tk. 1.80
	Less : Wholesalers, Retailers commission- 20% of MRP(B)	Tk. 0.36
		<u>          </u>
	Less : Distribution and selling cost- 18.89% of MRP (B)	Tk. 1.44
		<u>          </u>
	The nett price payable to Essential Drugs Company	Tk. 0.34
		<u>          </u>
		<u>          </u>
		Tk. 1.10

We may add here that our cost of distribution and selling is more than 34 paisha per sachet. So we have not taken into consideration even the full cost of distribution and selling,

# FAMILY PLANNING SOCIAL MARKETING PROJECT



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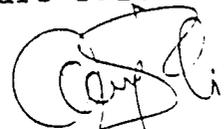
not to speak of any profit margin. Ours being a non-profit social marketing organization we would like to keep the price lower than the prices of ORS produced by other companies. We however do not like to sell our "ORSaline" at a very low price for the following reasons :

- 1 Very low prices usually refer to inferior quality products resulting in Buyer's reluctance to buy these products but ours is a superior quality product conforming to latest WHO specifications.
- 2 Many Companies have already raised voices against sanctioning of our ORS project. They will get another excuse to protest on the plea that our selling "ORSaline" at low prices will hamper normal marketing of ORS made by other companies.

Hence we would like MRP fixed at reasonably low level but not at extremely low level. We trust you will kindly appreciate our position and give your kind approval fixing MRP of our "ORSaline" at Tk. 2.00 per sachet of 13.95 gms inclusive of excise duty of 20 paisha per sachet. We shall be grateful if you kindly let us have your approval at an early date.

Thanking you.

Yours faithfully,

  
 ( Amjad Ali )  
 ORS Project Manager

B.C.C. : SAA/SA/MA/RLC

AA : mau

## LIST OF PERSONS CONTACTED

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13. Mr. Mushtaque Choudhury, Independent BRAC Evaluator
14. Mr. Abed, Director BRAC
15. Mr. Gholam Mustapha, BDG Secretary for Commerce, former chair of SMP Advisory Council
16. Dr. Suzanne Olds, USAID/Bangladesh
17. Mr. Dan Lissance, Manoff International

USEFUL SMP AND BACKGROUND DOCUMENTS PERTAINING TO ORS

<u>Name</u>	<u>Location</u>	
	<u>SMP</u>	<u>AID</u>
1. MRCB Market Research Study 9/21/85	X	
2. ORS Manufacturing Plan Feasibility Study by TESCON, 10/85	X	
3. Permission to set up ORS Manufacturing Unit SMP to Department of Industry, 1/14/86	X	
4. WHO/UNICEF Draft Report on NORP Production of ORS (Hans Faust), 11/85	X	
5. SMP/ORS Consultant's Review (Jerry Russell) JSI/USAID, 11/85	X	X
6. ORS Market Report for SMP (TESCON) (Demand forecast) 1/86 and 2/86 (rev.)	X	
7. USAID to PSI. Cooperative Agreement, July 1, 1985	X	X
8. Terry Louis, Country Visit/Status Report, 7/85	X	X
9. Anthropological and Marketing Research Plan for Social Marketing of ORS through BSMP (PRITECH, E. Green/T. Louis), 4/85	X	X
10. Proposal for a PSI/SMP Program in ORT (PSI), June 1985 (also earlier draft 5/85)	X	X
11. Draft Proposal for the Purchase of Land for SMP, 1/86	X	
12. Market Survey of ORS in Bangladesh (Draft) B.P.M.I., 9/85 (commissioned by Ford Foundation)		X
13. Evaluation of National ORT Program (NORP), Mehtab Currey, 9/85	X	?
14. Diarrhea and ORS in Bangladesh: Toward an ORS Social Marketing Strategy (PRITECH, E. Green), 7/85	?	X
15. Agreement between Nepal CRS and UNICEF for Marketing ORS, 1985		X
16. Manual on Treatment and Prevention of Diarrhea (ICDDR,B)	?	X
17. Similar Documents to above developed by PIACT/ Bangladesh	?	?