

NEW MARKETABLE CHICKEN PRODUCTS

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Poultry Marketing has undergone drastic changes. The sale of slaughtered ready-to-cook broilers in specialised shops is replacing the purchase of live birds for home consumption in the cities. Even in rural areas, consumers are beginning to buy slaughtered poultry directly from processors.

Poultry meat supply estimate may increase from 89,000 tonnes in 1971 to 150,000 tonnes in 1985 and further to 300,000 tonnes in 2000 AD. against a total demand of 0.69 Million tonnes in 1971; 0.91 to 1.06 Million tonnes in 1980; 1.05 to 1.40 Million tonnes in 1985; 1.57 to 1.61 Million tonnes in 2000 AD. Paradoxically the per capita consumption of poultry meat though recorded a rise from 0.15 to 0.61kg per head (a four fold raise) it is far below that in developed countries which is 2.47 to 5.95 kgs in many European Countries.

Fowl is not convenient to prepare in an unprocessed state. To-day the working class men, women and the affluent society demands convenience food items that can be quickly prepared and served with little time and effort. So extensive research has to be conducted in an effort to bolster the price of chicken and the most promising marketable products using fowl meat as a major ingredient, suitable to Indian dietary has to be developed. During the past few years, the processors of poultry had developed the know-how of Ready-to-cook chicken. But the idea of deboning the entire hen into an emulsified meat is innovative and the possibilities of new products are unlimited. To produce consumer products from the meat such as Hot dogs, chicken sticks, sausage, Bologna, Chicklona, chunkalona, chicken chunk rolls, spreads, patties, mock cutlets, canned chicken, frozen dinners, frozen baked goods, chicken hash, chicken burgers of various types, cooked salami, fermented salami, pies, chicken pizza etc. was the whole



new ball game and perhaps dreamed about, But not seriously

entertained. We haven't scratched surface, we have a long way to go and this should be a challenge.

We merely had to learn how to use chicken in these products

and incorporate chicken meat in chicken specialists viz. chicken leaves soup powder, chicken essence, Barbecue, Tandoori chicken, canned poultry curry, fried chicken, frozen chicken and gravy

packed in, pouch etc.

More over the use of these chicken meat in baby foods, soups chop suey, sausage product, wieners, frankfurters, and mortadella was not considered due to the economical feasibility of removing the meat manually.

Space don't permit to give a full account of all preparations herein. However, information on some of the preparations is furnished.

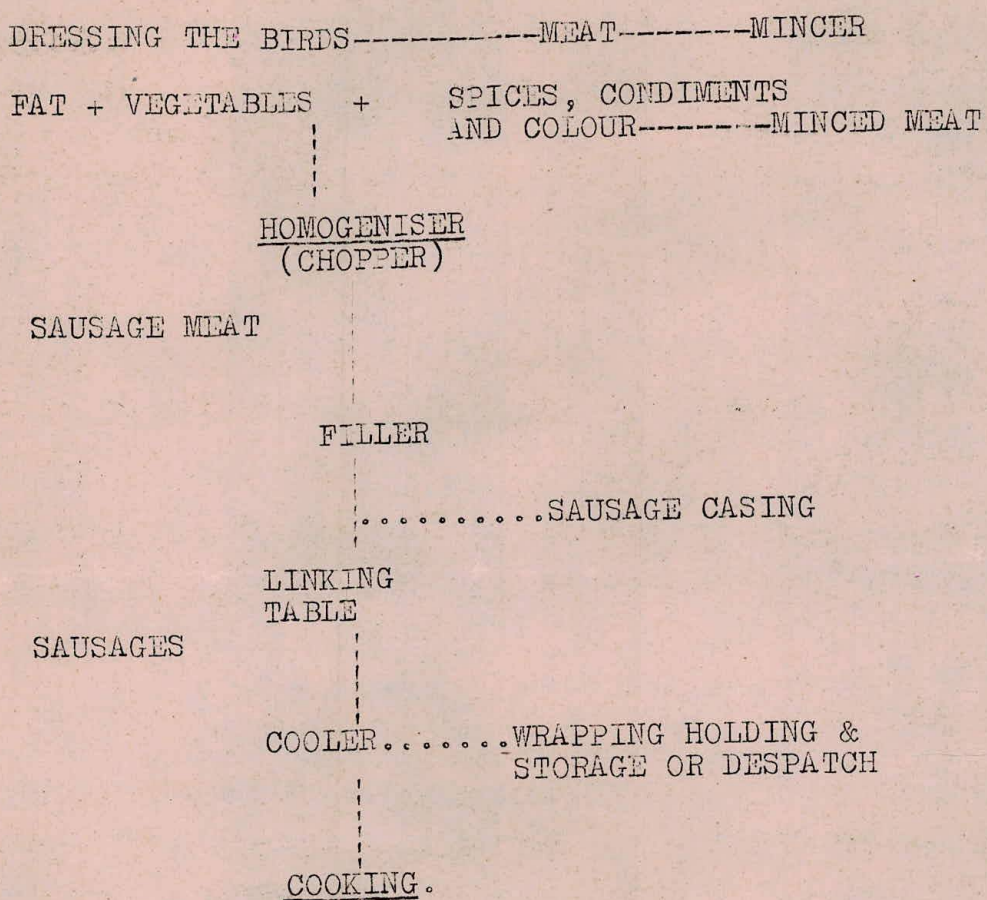
## S A U S A G E

Utilisation of emulsified chicken meat and seasonings for sausage is on the door step of reality. A basic recipe published by researchers at I.V.R.I. has been presented in Table.1. and the flow sheet for the preparation has been presented in Fig.1.



TABLE -

FLOW SHEET FOR MANUFACTURE OF CHICKEN SAUSAGE



Use poultry meat free of skin bones and tendons. Coarsely grind and mix with seasonings then regrind and stuffed into links. Sausage made from poultry meat need to be stored at cooler temperature say 4.4°C.



T A B L E .1.

Formula of chicken sausage

Sl. No.	Ingredient	Quantity	Percentage
1.	Meat	6.00	52.5
2.	Vegetable fat	2.00	17.5
3.	Vegetable	1.71	15.0
4.	Monosodium glutamate	5.66	0.05
5.	Sodium nitrate	1.13	0.01
6.	Sodium Nitrate	1.13	0.01
7.	Salt	285.62	2.50
8.	Sugar	114.26	1.00
9.	Bread	391.89	3.43
10.	Whole egg liquid	23.51	2.00
11.	Spices mix.	171.37	1.50
12.	Onion	342.80	3.00
13.	Ginger	114.26	1.00
14.	Garlic	57.11	0.50

FORMULA FOR THE SPICES MIXTURE USED IN

Name of the spice	Percentage in the mix	Qty(G)per 1kg
Anise	10	100
Capsicum	20	200
Caraway	10	100
Condomoim	10	100
Cinnamon	10	100
Cloves	2.5	25
Black Pepper	7.5	75
Turmeric	10	100
	100	1 kg.



BARBECUED CHICKEN: The preparations like barbecue, tandoori chicken etc. can further increase consumption of poultry products.

1. OVEN FOR BARBECUE: The design is available. It consists of a steel bowl of U shape with adjusting slide door to regulate air flow. A tray is also provided at the bottom to remove ash. A wire mesh is fixed inside the bowl 12-18 inches below the grill. A pair of grill made from 3" weld mesh is provided with wooden handles. This grill can be used for outdoor Barbecuing or oven built of bricks.

TANDURI CHICKEN: Also can be kept verywell for 13 days at 4.4°C and 44 days

2. TYPE OF CHICKEN AND MODE OF DRESSING: Pick up tender chicken Semi & cauded birds without damage to the skin is preferable. Split the bird in two halves by cutting along side the back remove neck and back bone completely. Dip the wing tips and trim the projecting ribs.

3. PREPARATION OF BARBECUE: Blend all ingredients like pepper chillies, onion, garlic etc. mix thoroughly with liquid ingredients to form a mixture. Pour this on a melted ghee in a sauce pan stir the sauce for 15 minutes. Bast this on Barbecue half in the end.

4. PROCESS OF BARBECUING: A slow cooking at moderate temperatures is recommended place the tender chicken on skin side upwards on the grill to avoid burning of skin. Baste the chicken with sauce to prevent Carcass from charring. Test the bird for " Doneness" by twisting the drum stick on wing of one or two halves from the lot. If the bone readily separates out from the joint the bird is done. This will take 45-75 minutes. The recipes formulated for Barbecue sauce (table-- ) have been tried and found acceptable.



(B) Spicysauces

Ingredients	Formulations		Ingredients	Formulation	
	1	2		1	2
Ghee	2 Tb. Sp	2 Tb.Sp	Ghee	2 Tb.sp	2 Tb.Sp
Water	1 1/2 cup	1 1/2 cup	Water	1/3 cups	1 1/2 cups
Tomato Ketchup	1/T.sp	..	Vinegar	3/2 oun	...
Tamarind concentrate	..	1/2 T.sp.	Tomato Juice	2/3 cup	...
Vinegar	1/2 Tb.sp	..	Tamrind con- centrate	1/2 ..	1/2 T.Sp.
Procestershire sauce	2/3 Tb.sp	..	Salt	2/3 T.sp	2/3 T.sp.
Prepared mustard	1/2 T sp	1/2 T.sp	Chilli Powder	2/3 T.sp	1/2 T.sp
Bengal gram flour	1/2 T.sp	1/2 T.sp	Pepper Powder	--	1/2 T.sp
Chilli Powder	1/2 T.sp	1/2 T.sp	Prepared Mus- tard	1/2 T.sp	--
Brown Sugar	2/3 T.sp	2/3 T.sp	Clove Powder	1/2 T.sp	1/2 T.sp.
Salt	2/3 T.sp	1/2 T.sp	Green chilli	3/4 T.sp	..
Bay leaf	1	1	Garlic	2 small Pieces	
Coriander leaf	1/2 Lb.sp	2/3 Tb.sp			
Onion	1 Tb. sp	1 Tb.sp			
Cinnamon powder		1/2 T.sp			
Garlic		2 small			



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Poultry Pickle:

Traditional meat pickle can be handed transported and stored for 120 days at ambient temperatures without any appreciable loss of its quality characteristics. The ingredients used for the poultry pickle are shown in Table-2

T A B L E - 2  
INGREDIENTS USED FOR THE POULTRY PICKLE

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Poultry meat with bone	5 kg.
Salt	230 gm
Sodium Nitrate	1 gm.
Monosodium Glutamate	5 gm.
Vinegar.	1.5 litre
Red Chilly Powder	75 gm.
Garlic.	30 gm.
Black Peper.	30 gm.
Jeera	15 gm
Clove.	5 gm
Cinnamon.	5 gm
Refined Mustard oil	500 ml

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TANDOORI CHICKEN

Ingredients:

One Croiler about 1 kg in weight  
3 tsps. lime juice  
2 tsps chilli Powder  
2 tsps. garlic  
2 tsps. onion juice, garam masala  
3 tsps. butter  
1½ tbsp. juice of raw papa a or vinegar  
2 tsps. Papmika.  
Salt & Pepper to taste

Temperature to be set 250 °C



- Method :
1. Rub chicken with papaya juice or vinegar.
  2. Make very fine cuts into the chicken in parts.
  3. Mix lime juice, chillipowder, ginger, garlic onion juice and salt.
  4. Rub the mixture on the chicken
  5. Keep aside to marinate for the next 2-3 hours brushing with the juice that trickles from the chicken.
  6. Keep the chicken on a flat baking tray cover with foil. Bake for 20 minutes.
  7. Remove foil, bake chicken with dripping in the tray. Bake for 40 minutes or until cooked. Baste at intervals. Brush with butter, bake for a few minutes more to be crisp. Sprinkle with garam masala serve hot.

The Tanduri chicken can also be kept very well for 13 days at 4.4° C and 44 days at 6.77°C

FROZEN PRODUCTS: Frozen Products include pies, patties pizzar etc. and can be sold in boilable pouches foil trays and plastic lined paper cartons. Sheer convenience launched these products. The product needs to be removed from its outer wrapping and heated in a moderate oven to serving temperature and it is ready to be sliced or roasted and served.

CANNED CHICKEN PRODUCTS: Whole chicken, fricassell, stew, noodle dinner, chicken A-La-king curried chicken, chicken liver pate sandwich spread etc.

Older chicken and broiler birds when canned, can be conveniently stored for 6 months to one year. The whole or cut-up-chicken is canned with spiced chicken curry in brine or in solid pack form. Excess fat were trimmed any bone projections, fascia, tendon and blood clots were removed. The pieces were fried with ghee in steam jacketed kettle to get the desired light brown colour of the meat. The meat is fried for 15 minutes in 230 grams of dalda. Gravy has to be prepared with the materials listed in Table v-. The hot gravy is filled into the cans, sealed processed, cooled, labelled. Canned chicken usually contains a chicken with broth but without gibblots mature poultry considered better than

A number of products based on meats were formulated and procedure for their production were developed for use especially

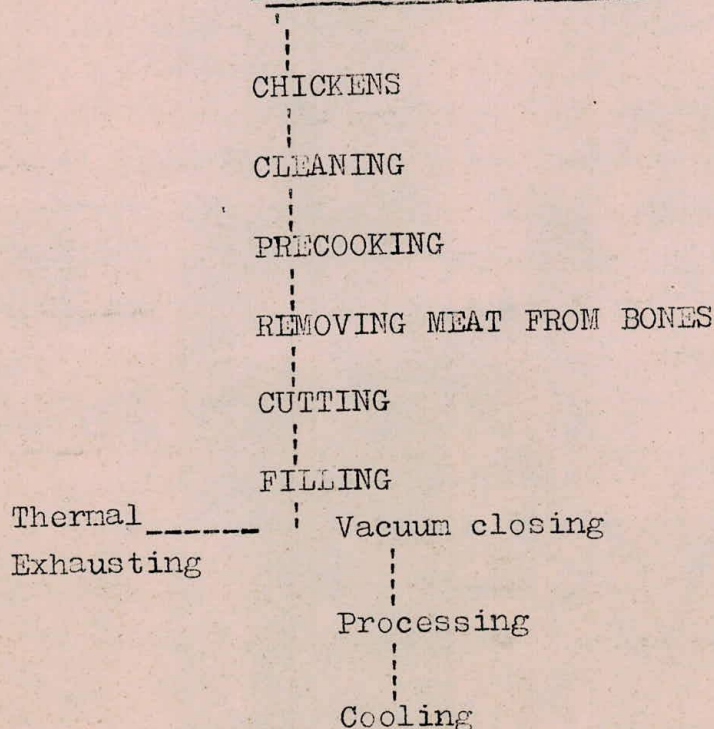


for convenience as emergency food items for inclusion in army ration some of these products are precooked dehydrated ready-to-eat viz. chicken flavoured with vegetable broth and spiced chicken and rice, precooked chicken rice and beans canned chicken curry. Chicken biriyani. Army has shown interest to some of these products. The following procedure for preparing chicken for canning is followed;

CHICKEN-A-LA-KING. To 45.3 kgs of properly prepared chicken add lukewarm water to cover and cook until tender. Add .9 to 1.4 kgs salt a few minutes before removing the chicken from the kettle. Take the chicken from the kettle and remove the skin and bones. A half pound of tomatoes and one pound of potatoes should be sliced and cut into the desired size.

Next sauce is made from chicken stock which is the concentrated water left in the kettle after the chicken have been cooked. Some formulas call for the addition, of milk. The water is melted by heat, and flavour is added to the melted butter and stirred to smooth consistency. The cooled chicken stock is added to the flour and butter mixture and cooked until it is of creamy consistency, then add the chicken, pepper tomatoes and potatoes. Mix and heat thoroughly and fill into the cans

FLOW SHEET OF CANNING





The armed forces require that canned chicken and vegetables be prepared using the following formula.

	<u>kgs.</u>
Chicken meat	16.0
Chicken skin	2.0
Chicken Fat	2.6
Potatoes	5.3
- 1/2 ..... Carrots	5.2
- 1/2 ..... Peas	3.4
Pepper	1.25
Salt	0.57

Broth sufficient to give mixture content of not over 75%

#### CHICKEN SANDWITCH SPREAD

##### FORMULA

80 Lbs of chicken meat and skin  
2 lbs of onion  
2 lbs of salt  
1 oz of ground white pepper  
1 oz of ground cloves  
1 oz of ground mace  
1 gallon chicken broth  
4 lbs flour if desired.

Generally the meat is finally ground and the remaining ingredients added in this operation. The mixture should be preheated to 90°C before filling.

✓ CHICKEN BROTH Chicken broth is prepared from the stock obtained in pre-cooking chicken for canning. This stock may be fortified with boiling chicken skins, and bones, in small amount of water in pressure cooker for 3-4 hours, at 105°C. Strained to remove small bone fragments. The broth is then seasoned as desired before canning.

CHICKEN FRICASSEE: Chicken Fricassee consists of pieces of chicken gravy. The chicken can be either uncooked or cooked before canning. Chicken pieces generally make up 50-65% of the weight of the can contents.



FREEZE DRYING CHICKEN: Freeze-dried chicken meat is used extensively in dry chicken soup mixtures and in combination with other ingredients to make soups, stews and other prepared dishes with this method raw poultry or large pieces cooked p-poultry retained original nutritive values, flavour, shape and texture without hardening of the outer surface. Using this method the meat is quickly frozen on trays at (-40°F) The temperature then raised to a carefully controlled heat of sublimation whereby ice evaporates from the food without thawing the frozen portion. The moisture level is normally reduced to 2% and so the poultry meat will keep for 2 years without refrigeration.

CHICKEN MEAT CUBES: Meat extract or broth and meat hydrolysates form the base, while the flavour is imparted by onion, and leaves of corriander and mint.

Precooked brown chicken:

It has to be steamed with phosphated parts, with the batter and breeding on, thus preventing loss of the juices. By maintaining the juices one gets a better yields and more flavour.

CHICKEN OR POWDER:

SOUP POWDERS: Can be make from old culled hens using minced meats.

POULTRY MEAT IN SOUPS

Because of their convenience, high nutrition value and generally fine quality and flavour, commercially produced canned soups are widely used. Diced, precooked chicken meat make excellent ingredients for this purpose.

POULTRY ROLLS: Poultry rolls are made up as a raw product, cooked cured or smoked products. When the meat is precooked for rolling poultry gelatin or any other birds such as wheat gluten is added and the rolls are molded under pressure. The following percentage of white and Dark meat and ratio of large pieces to small pieces in a roll can be followed as a guide to make a quality product.



	(percentage)	
Large pieces of white meat-----	35 - 38	half breast
Large pieces of Daske meat-----	32 - 35	leg and thigh
skin -----	10 - 12	
Small meat pieces-----	18 - 20	

Seasoned with salt, pepper, Monosodium glutamate.

Poultry rolls sold as raw meat are tightly packed in casings.

Poultry rolls can be made in number of shapes; cylindrical Rectagular,

Frozen at - 29.12°C and held 17.92°C until cooked.

#### B.Cooked Poultry Rolls:

Rolls sold as cooked products are tightly packed in a fibrous casing and sealed. Roll sare placed in cooking vats with water temperature at 74.5°C 83 °C cooked until an internal meat temperature of 66°C is reached. Chill rolls first in a cold water then in a cooler 1-2°C before freezing at - 29.12°C Product should be held in a frozen storage.

The chicken meat rolls has excellent sliceability.

#### CHICKEN ESSENCE:

Partial hydrolysis and subsequent concentration under vaccum.

#### CHICKEN STEAKS:

Breaded chicken breast steaks and breaded dark and white steaks. The pieces can be tenderized and shaped into steaks with a cube stea machine. By utlizing the skin and butter and breading, one can obtain excellent yield.

#### CHICKEN FRANKS OR CHICKEN BOLOGNA

Bologna and franks are the same products except franks are stuffed in small casings and eaten hot while bologna is stuffed in larger casing sliced and eaten cold.

#### CHICKEN BONELESS ROAST WASTE FREE OVEN READY:

Processed with white and dark meat the natural proportions a small percentage of skin, finely minced to provide binding salt and a ace of mixed herbs are added and the bar is cooked at controlled temperature, and then frozen.



VILLAGE PEOPLES' SOURCE OF DRINKING  
WATER, USE OF LATRINES AND BELIEFS ABOUT  
CHOLERA, IN THREE PARTS OF INDIA-PRELIMINARY REPORT

### Introduction

Cholera results from a combination of many factors. A source of infection is necessary, the immune status of the population is a key factor, and an environmental situation conducive to spread through water and flies also is important. Recently attention has been focussed on two other key factors: peoples, sanitary practices, and peoples' beliefs about cholera as a disease. In a sense, these factors are part of the psychological immunity of the human organism to cholera. Such factors can change and with a systematic and careful approach much more effective ways of altering them can be devised and applied. This aspect of cholera control and control of other intestinal diseases has barely begun and needs much fuller exploration. For this reason during village studies undertaken as part of the research-cum-action project, information was collected about the two factors mentioned above.

### Method

The study was conducted in fairly typical villages in the areas of Najafgarh (Delhi), Poonamallee (Madras) and Singur (West Bengal). A stratified, systematic sample was obtained and a senior person in each of these households was interviewed. Findings are reported from interviews with a total of 3306 persons, in 68 villages in the areas given above.

The questionnaire used for each interview included, among other items, the following questions:-

1. From where do you get your drinking water?
2. Do you use a latrine?
3. Would you like to have a latrine if it was cheap enough?
4. What causes cholera?
5. How is cholera cured?
6. How is cholera prevented?

Whatever answers were given <sup>were</sup> written down. These were later classified into categories. In each house it was also recorded the type of latrine if there was one.

### Findings

Almost all the respondents in the Najafgarh and Poonamallee areas said they take drinking water from open



wells. In the Singur area, almost everyone appeared to be drinking tube-well water only.

Latrines were present in less than 4 per cent, households in the Najafgarh and Poonamallee areas, except that in the latter, 12 per cent village leaders houses had latrines. At Singur, there was a very low frequency among Harijans, but other groups had latrines in from 10 per cent to 23 per cent households.

'Regular' use of a latrine was reported, by very few people in any area. 'Occasional' use ranged from 29 per cent of the Harijans at Najafgarh to 90 per cent of the leader group at Poonamallee. When asked whether they would like to have a household latrine, the proportion of 'Yes' answers ranged from 42 per cent among the Poonamallee group to 83 per cent among muslims in the Singur area. Though the low degree of use is serious, there is a foundation of interest on which to build an effective latrine programme.

The cause of cholera was said to be excessive heat, but a large proportion of respondents in the Najafgarh area. 'Contact with a sick person' was most commonly named at Poonamallee and 'bad food' was most commonly named at Singur. 'Bad food' and 'bad water' were rarely named at Najafgarh, but were named by 7 to 11 per cent in the leader group at Poonamallee, and by 13 to 17 per cent in every group at Singur. Germs were rarely named at Najafgarh but were named by 9 per cent and 22 per cent of the Poonamallee and Singur leader group respectively. Faeces of a sick person were rarely mentioned.

For cure of cholera, home-treatment was most popular at Najafgarh and allopathic medical treatment was most popular at Poonamallee and Singur.

Two-thirds of the respondents in the Najafgarh area said they did not know how to prevent cholera, or that cholera cannot be prevented. The response at Poonamallee was almost similar. Only at Singur was the number less.

Methods of preventing cholera, such as protecting food and water, immunization, and excreta disposal were mentioned by very few respondents at Najafgarh. At Poonamallee, about a fifth of the leader group mentioned immunization, cleanliness, purifying water, and protecting food. At Singur, immunization was mentioned by a half to three-fourths of all groups in the sample, and other measures relatively rarely.

### Discussion

The finding that villagers at Singur almost all insist on drinking tube-well water is a clear indication of what can be done with a well-organised, continuous environmental sanitation programme. Not so many years ago, these same villagers were described in Union Board Reports as "resistant" to such an



innovation. The success in maintaining their pumps also demonstrates that, with education and follow-through, the maintenance problem which is feared elsewhere can be solved. The prevalence of use of tube-well water certainly contributes very much to the decline in cholera which has occurred in these villages.

The very low use of latrines poses a most serious sanitation problem. There appears, however, to be a group of villagers who do not reject the idea of having a latrine and who recognize it as at least partially desirable. This indicates a foundation of interest on which to build an effective latrine programme.

The lack of knowledge about the cause and prevention of cholera points clearly to the need for developing systematically the educational aspects of rural health operations in this regard. There did not appear to be any serious potential clash with superstitions or other fixed ideas about cholera. Environmental factors especially, seem to be stressed by the people, and offer a good started to further educational efforts.

It appears that the leaders group has more accurate knowledge about prevention and constitute a good nucleus for further educational work.

Of all groups interrogated, harijan groups appear especially to need education about sanitation principles.

A Model Methodology for Involving Panchayat as  
Change Agency

By

Vinod M. Patel

The three tier system of Panchayati Raj consists of Gram, Taluka and District Panchayats. The Family Planning Programme in Gujarat State has been transferred to the Panchayat administration since April 1969.

The present paper suggests a model methodology for organising intensive Family Planning campaign by arranging vasectomy camps through Taluka Panchayats and their entire machinery. It is based on the experience of Ahmedabad District Panchayat which has demonstrated three times higher performance in male sterilisations during January to March 1970. The

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Printed booklet: Issued by State Family Planning Bureau,  
Directorate of Health and Medical Services,  
Gujarat, Ahmedabad, 1970.



methodology has educational dimensions.

### Campaign

An intensive family planning campaign was organised from January to March 1970. The detailed planning and implementation of education and service campaign was done by the Ahmedabad District Panchayat through their Taluka and Gram Panchayats by involving non-officials and all the field staff of the Panchayats. Leadership was provided by the Ahmedabad District Panchayat President, for implementing educational campaign through the elected members of the District Taluka and Gram Panchayats on the one hand and by the District Development Officer in planning and executing the vasectomy campaign through the Taluka Development Officers and their staff. Initially, the District Health Officer played vital roles in involving Panchayats as change agency.

Seven large vasectomy camps were organised by the Taluka Development Officers by mobilising all available resources in personnel such as the Talati-cum-Secretaries (Mantries), Motivations, Teachers, Sarpanchas, Gram-Panchayat members and pooling of all vehicles of Panchayat and Public Health Department. The best available family planning services were provided.

The important achievement of the campaign was to popularise vasectomy operations, as Ahmedabad District was predominantly a tubectomy oriented district.

The model methodology for involving Panchayats takes into consideration the below mentioned factors and experiences in the field:

1. Experience of working with the Ahmedabad District Panchayat and understanding their mode of work.
2. Knowledge, training and experience for evolving such a methodology of community involvement.
3. Personal field experiences of implementing Family Planning Health Education programme through Panchayats in Kaira District, during 1963-65.



## Strategy at various levels

### 1. State

D.O. letters, encouraging and evaluating the family planning performances of the District by the Minister of Health to all District Panchayat Presidents and from the Secretaries to the District Development Officers. Critical review by the Development Commissioner of the family planning progress, with pooling of experiences and seeking suggestions. A one day state level workshop of all District Panchayat Presidents and District Development Officers, to prepare action programme on family planning which can be followed by all District Panchayats.

### 2. District

- a) Meeting of District President, District Development Officer (D.D.O.), Collector, Dy. D.D.O., District Health Officer, District Family Planning Medical Officer, Chairman of District Health Committee and Chairman of District Education Committee to plan organisation of campaign.
- b) Decision of the above, communicated to Taluka Presidents, Taluka Development Officers, Mamlatdars and Medical Officers of the Primary Health Centres by getting D.O. letters written by their respective heads.

They may send the suggested action programme to be followed by their subordinates.

- c) Convening of a workshop by the District President and District Development Officer of all Taluka Presidents, Taluka Development Officers and Medical Officers of PHCs and the Chairman of Taluka Health Committees to discuss and decide the methodology of organising the campaign. The convenor may be assisted by two State level Honorary Family Planning Organisers and active members of the State Family Planning Council.

### 3. Taluka

- a) Orientation training camps for primary teachers of the Taluka may be organised for one day at Taluka head-quarter.
- b) Similarly, orientation training camps of Sarpanchas, other leaders and Talati-cum-Secretaries may be organised with specific objectives. Orientation training to leaders and other volunteers may be given by following the methodology given in the booklet on 'Dimensions of leadership and involvement of leaders as Change Agents, in health and family planning programme (p.33-44).



- c) Each Taluka may be divided into 8-12 sectors of 20,000 population each. A team\* comprising a teacher, talati-cum-Secretary and Family Planning worker will motivate cases for their sector. Members of the teams of each taluka may be organised to discuss and finalise the action programme.
- d) Taluka Panchayats can ask the Gram Panchayats of the Taluka to convene their members along with other influential persons to discuss and decide about the suggested action.

#### 4. Village

- a) Each team\* will work in the villages by organising group meetings of village leaders and beneficiaries to stimulate them individually and in groups to accept sterilisation, IUD and Nirodh.

Each Gram Panchayat will arrange a meeting of its members, other interested and influential persons, representatives of Taluka Panchayat, and Family Planning worker to decide to undertake the campaign for the welfare of the village people.

Suggested discussion points and actions required to be taken are given.

- b) Methodology of motivating cases to use family planning devices has been outlined and literature suggested.

#### 5. Organisation of Vasectomy Camp

- a) Detailed Plan Guidelines are given for organising a vasectomy camp. Among others are the division of the responsibilities, the selection of the most popular surgeons for rendering services, proper and suitable physical facilities, on the spot payment to operated persons and motivators, deputation of nursing staff for camps, prizes and merit certificates for the different categories of field staff.

##### b) Operational steps

1. Motivation and registration of cases.
2. Information on camp.
3. Transport.
4. Quality of services.
5. Scrutiny of cases.
6. Payment of incentives.
7. Instructions and Nirodh distribution.
8. Service cards.
9. Publicity of the camp.
10. Recognition.



- c) Follow up It is stressed that follow-up should be done within 2 or 3 days if necessary by the Medical Officer of the Primary Health Centre. Immediate and necessary treatment should be carried out using Rs. 200/- of the family planning contingency for medicine and quality care.

During the second follow up visit, workers will try to encourage the satisfied acceptors to function as motivators, including the fact that there are monetary incentives for doing motivation work.

### COMMUNITY APPROACH TO FAMILY WELFARE

#### AN EMPIRICAL STUDY

By

B.B. Chatterjee

Hanuman Prasad

S.C. Srivastava

Banwasi Seva Ashram, Govindpur, has been serving a tribal area of Mirzapur district in the State of Uttar Pradesh since 1956. It organises Gandhian programmes of construction and spreads the message of Gramdan and peace, in this area. After the famine of 1966-67, the challenge of developing the area was accepted and Agrindus Project (sponsored by the Agrindus Victor Collancca Memorial Institute) was founded in 1967 under the auspices of the Sarva Seva Sangh, Gandhi Smarak Nidhi and War on Want (England). The aim of the project was the total and integrated development of the area and the prevention of further famine and starvation.

Later on, the Literacy House, Lucknow, U.A.S.A., New Delhi, and the Pathfinder Fund of America helped organise programmes of functional literacy, food production and family welfare in this area.

#### Programme

The family Welfare Programme carried out at the Ashram was a broad-based long term work plan fully integrated with the overall total development programme undertaken in three Blocks in order that the community faces its problems in a holistic way.

A comprehensive scheme for family welfare was organised, including a preliminary health survey of 25 villages and development of a programme of preventive medical care. The

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Report of an evaluation of the Family Welfare Programme of the Agrindus Institute, Banwasi Seva Ashram, Govindpur, Mirzapur, India, 1970.



hypothesis was that given an incentive and remunerative employment opportunities, health services and education, the rural consensus will favour a small family.

At the time of study (1970), the project had been functioning for about 24 months. It was planned to develop about a hundred villages.

The programme was started with an out door clinic consisting of a doctor, a part-time *vaidya* and a Part-time nurse.

The policy at the Clinic was:-

- a) To treat the ailment.
- b) To explain the cause and effect in cases of infections and deficiency diseases.
- c) To have informal talks about the customs, dietetic habits, ways of life of the villagers, etc.
- d) To have informal and incidental talk about Family Planning.
- e) To explain the programme to the responsible people of the villages.

A nominal charge for medicine was levied. Rural communities would be encouraged to think and plan for themselves for providing answer for all the year round remunerative employment, education for cultural upliftment, training in crafts and rural industries, and a programme of health education, medical care and nutrition guidance.

The Medical Care programme was phased as follows -

#### PHASE I

1. Conducting of health and social survey in small clusters of villages.
2. Developing local community groups to discuss local problems and plans.
3. Initiating a programme of health care and preventive medical work including sanitation.

#### PHASE II

1. Intensification of the above programme in about 25 villages.
2. Arranging exhibitions and audio-visual methods and distributing literature.
3. Initiating better health practices.
4. Integration of local leadership and potential workers for training programme in intensive medical relief and family planning methods.



### PHASE III

1. Expansion of work already undertaken to develop methods of work of family welfare.
2. Extension of activities in the whole area.
3. Evolving new methodology, high-lighting them for application and multiplication.

Certain ground rules were also formulated to serve as principles of working the plan. These are:

1. Felt needs of the villages would be the starting point of the project.
2. Where felt needs are not expressed, demonstrations would be held to facilitate development of such awareness.
3. Involve villagers maximally and in a very calculated manner to ensure an experience of success and elevated social status in the community.
4. To provide information, but there would be no attempt to motivate the community by the organisation. Such motivation should come as social pressure from the local leadership itself.
5. Replace traditional pattern of socio-economic activities with a multi-faceted approach of improved agriculture, education, health, etc.
6. To capitalise on extraneous social events, such as building of large dams, migration of farmers, etc. for marshalling community effort for reconstruction and development.

The purpose of the present study was to provide bench mark data to assess the course, nature, and extent of progress over a period of time.

### Evaluation Objectives

1. What <sup>is</sup> the situation of the community among whom the scheme is being operated, and is likely to exercise same impact.
2. How far the aim and objectives of the scheme are being fulfilled.
3. What sort of changes are coming into existence as a result of the working of the scheme and are these changes congruent with the avowed aims and objectives of the scheme.
4. Lastly, what sort of information can be gathered from the field so that by feeding it back to the organisers and implementers of the scheme, an improvement in the working of the scheme can be affected.

The areas of assessment were as follows:

- a) General nature of the life and habits of the people, including employment pattern, cultural practices, traditions and customs, education, health, sanitation, etc.
- b) State of knowledge, information, awareness etc., about the project, about facilities and opportunities provided by it.



- provided by it.
- c) Nature, behaviour and practices of the community with regard to:
- i) Food and Dietary habits.
  - ii) Preventive measures.
  - iii) Housing, sanitation, environmental hygiene, etc.
  - iv) Drinking water.
  - v) Medical and therapeutic measures adopted in case of common sickness, of infectious diseases, of epidemics, of serious accidents or mishaps.
  - vi) Hygiene and sanitary habits.
  - vii) Family Planning Practices.
- d) Belief and opinion towards the ideal size of the family in the perspective of structure and functional changes coming over the community.
- e) Beliefs and attitudes of the opinion leaders of the community regarding the changes coming over the community as a result of the working of the project.
- f) Organisational aspects of the clinic, so far it is exercising an impact on the community.

Variables of study: Three types of variables were defined, independent, intervening and dependent. The independent variables included working of various agro-economic schemes and the clinic Extension and diffusion efforts for Gramdan and rural reconstruction and communication facility with Ashram Projects. The intervening variables comprised various aspects of their social cultural and economic ways of life. The Dependent variables were the awareness, knowledge and information about the Agrindus projects operating in the area and emergence of certain beliefs, attitude and opinions regarding such items as size of the family, medical care, food habits, etc.

Sampling: It was assumed that the spread of the programme would be governed by the ease of communication with the Ashram Headquarters. Five villages were, therefore, chosen, which could be ordered on a continuum of 'communication facility' ranging from 'most favourable' to 'least favourable'. Thus, the village at the end of the communication facility, with no chance for the projects being started even at the time when the evaluation was undertaken, was considered as a 'control' village, and the other villages where the projects had been in operation partially or fully were regarded as 'experimental' villages. The Project had been started earlier in the nearby villages, and later in the far off villages.

Data were collected from different sets of respondents and for different variables, using the following instruments:

1. Schedule B - For eliciting information from villages selected in the sample.



2. Schedule A - For studying the functioning of the Agrindus Project.
3. Schedule C - For studying the opinion, attitudes and reaction of the staff.
4. Schedule D- For eliciting information from heads of selected house-holds.
5. Schedule E- for interviewing local health workers with and without kit supplied from the clinic.
6. Schedule F -An interview guide for interviewing local opinion leaders.

Schedules A, C and E were concerned with proving the independent variables, Schedule B covers some of the intervening variables and Schedules D and F are meant to assess dependent variables.

The respondents were as follows:-

Twentyfive per cent of house-holds in the sample will be selected on the basis of stratified random sampling; a group of 20 persons in the sample villages could be considered opinion leaders and knowledgeable persons, seven health workers attached to the clinic, three with medical kit and four without medical kit; and the Director of the Agrindus Complex and the Chief of the Family Welfare Project.

These multi-level and multi-type samples were interviewed in a structured manner with the help of schedules and interview guides.

#### Limitations of study

The sample of villages was small as time for execution of study was limited. A corrective for this was the construction of fairly comprehensive and detailed tools with various built in checks and counter-checks. With a less sophisticated population more time was needed to establish rapport to obtain certain items of information. The survey is meant to indicate certain trends which will only be confirmed, by a re-surveys.

#### Findings

will The findings are presented in some detail to provide a clear, unbiased and authentic picture of these villages as they stand today so that resurveys have value. A general perusal of the findings seemed to indicate that certain positive trends appear to have been established. There is a general awareness about what the Ashram stands for. There are signs of emergence of an idea that the Institute may be looked upon as an Agency laying down the future locus of growth of this area in a comprehensive fashion.

Some of the important findings of the study are:

1. Knowledge of villagers has increased with regard to agriculture, village industries, health and sanitation and hygiene.



2. Employment opportunities have been created.
3. Income has increased from employment opportunities created and agricultural production has gone up including the introduction of new crops of vegetables and wheat.
4. Literacy per centage has risen from 4 to 9 per cent in the command villages.
5. Knowledge about health sanitation and hygiene has been broadened.
6. People are coming forward to receive hospital treatment and faith in other types of indigenous medicine is now diminishing.
7. There is a consciousness of family size, and people have started discussing related problems in depth and with frankness.
8. Community capital formation programmes such as dam construction, digging of drinking water wells, reclamation of land have begun. Labour co-operatives have been started and committees for common endeavours such as the plucking of tendu leaves, shellac collection and katha making.
9. An ideal dairy and agricultural farm set up by Agrindus has had a significant effect on the area.

#### SUGGESTIONS:

In the light of the study findings, a number of measures have been recommended for socio-economic development. These include various developmental activities in the field of Agriculture and animal husbandry and the encouragement of house-hold and village level industries based on local resources available. It is hoped this will counter-act the evil effects of over-centralised growth of capital intensive industries in this area.

There is considerable emphasis on village literacy schemes so that people can take the help of modern science and technology.

On the health side, a health education extension programme using different approaches and media has been outlined. The programme would not only relate to Family Planning but also to communicable diseases, safe drinking water, ventilated houses and general cleanliness. Among the institutional health education programmes, a number of suggestions have been made for the organisation of health camps.

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# SYMPOSIUM ON THE UTILISATION OF FARM WASTE FOR RURAL INDUSTRIAL GROWTH

Efficient preparation and conservation of the Farm Yard Manure  
in augmenting our nutrient resources.

R. Ananthanarayana and B.V. Venkata Rao

Department of Chemistry and Soils  
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## ABSTRACT

Under present day constraints in respect of energy, raw materials and associated inputs necessary for the production of fertilisers there is a need for reemphasis on increased mobilisation of local manurial resources like Farm Yard Manure, compost and green manures.

In this paper, attention has been focussed on the efficient preparation and conservation of Farm Yard Manure besides indicating its positive contribution to reducing the dependence on fertilisers to supply nutrient needs of our agriculture.

\* \* \*

It is reported that if only half the natural fertiliser is mobilised and used there would have been no fertiliser shortage in the country. During 1974-75 production of nitrogenous fertiliser is of 1.2 million tonnes and that of  $P_2O_5$  is 0.33 million tonnes. But the consumptive figures for these nutrients were 2.61 and 0.96 million tonnes respectively. The difference was met by imports. It is a paradox that India with such a vast manurial resources:- 11 million tonnes per year of rural compost, and 800 million tonnes per year of city sewage (Roychaudhri, 1974) has to import fertilisers. Therefore it is imperative that all our farm and urban waste should be properly collected conserved and augmented with reference to both quality and quantity under our farm conditions. According to Swaminathan (1975), we may need about 4.6, 3.4 and 1.92 million tonnes of N, P, K respectively by 2000 A.D. He has advocated, tapping of all the organic manurial resources as the present installed chemical fertiliser productivity is only of the order of 1.46 and 0.50 million tonnes of nitrogen and phosphorous respectively, Quoting again Swaminathan, the nitrogen requirement for the year 2,000 A.D. can be easily met from what goes into waste in 1973 itself. The excreta of human being yield 11 lb of nitrogen per individual per year and cattle kept in sheds for 12 months yields 21.90 lb of nitrogen per head per year. Taking the human population as 550 million and cattle population 220 millions, the total nitrogen available is 4.75 million tonnes i.e. more than what will be required in 2000 A.D.

In view of the changed fertiliser cost pattern in the last year or so, the conservation of natural farm waste for application to soil instead of its use as fuel becomes an urgent necessity.



Farm yard manure consists of dung or solid excreta, urine or the liquid excreta of farm animals, mixed with varying amounts of straw, litter and other organic farm refuse. Dung consist of the insoluble and undigested residue, of the food along with certain fluids from the digestive tract. These residues are rich in nitrogenphosphorous and potash, which serves as a source of plant nutrients and organic matter which on putrifactory decomposition yield substance similar to soil humus. This is responsible for improving the soil as to its physical condition. Urine is derived from the digested food and the waste products, arising in muscular and other tissues. In addition to dung and urine F.Y.M. consists of litter which consists of straw, and other plant waste used as bedding. It helps in the absorption of urine.

Quality and quantity of F.Y.M. product depends on

- (a) Nature of litter used (Table I)
- (b) Class of animals used (Table II)
- (c) Purpose of which the animals are kept
- (d) Food given to the animals
- (e) handling of manures.

TABLE I

Nature of litter regarding its chemical components  
STRAW OR STALK

	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
	in percentage		
Paddy	0.36	0.08	0.71
Wheat	0.53	0.10	1.10
Jowar	0.40	0.23	2.17
Maize	0.42	1.57	1.65
Batra	0.65	0.75	2.50

S Source: Hand book of Agriculture I.C.A.R. (1965)

Amount of fresh excrements produced by farm animals are subject to wide variations, being controlled by the kind of animal, age, amount of food, activity etc., However an approximate averages (Table II) can be used as a comparative basis of reference in estimating amounts of organic manure that can be reasonably expected from farm animals.

TABLE II

Amounts of excrements produced for 1,000 pounds of live weight by Farm animals

Kind of animal	Total excrements	Solid pounds	Liquid pounds	Percentage of excrement in solid	percentage excrement in liquid
Cow	27,000	19,000	8,000	70	30



1	2	3	4	5	6
Horse	18,000	14,000	3,600	80	20
Pig	30,500	18,300	12,200	60	40
Sheep	12,500	8,300	4,200	67	33

Source Van slyke (1953)

Further, the approximate amounts of plant food constituents produced annually in the fresh excrement by a single animal of given weight can be readily calculated (Table III)

TABLE III

Approximate plant food constituents produced annually by excrements by farm animals of given weight

Kind of animal	weight in lb.	Nitrogen in lb.	Phosphoric acid pound	Potash pounds
Cow	800	125	30	102
Horse	1200	154	52	124
Pig	200	30	21	26
Sheep	100	12	5	13

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TABLE IV

Average composition of excrement of the Farm animal are given in Table

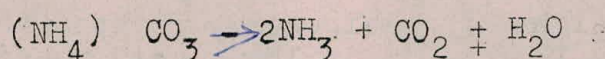
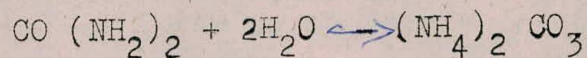
Animal	Nature of excrement	Moisture	Organic matter <i>Percentage</i>	Nitrogen	P <sub>2</sub> O <sub>5</sub> in percentage	K <sub>2</sub> O
Cow	Solid	84.0	13.6	0.30	0.25	0.10
	Urine	92.0	6.0	0.80	Traces	1.35
Sheep	Solid	58.0	36.0	0.75	0.60	0.30
	Urine	86.5	9.9	1.40	0.05	2.10
Horse	Solid	75.0	21.0	0.53	0.33	0.40
	Urine	90.0	8.0	1.35	Traces	1.25
Pigs	Solid	80.0	17.0	0.60	0.45	0.50
	Urine	97.5	1.5	0.58	0.10	0.45

Source: Venkata Rao B.V. (1958).



From the above data (Table III) it is clear that liquid portion of the excreta is rich in nitrogen and potash, whereas it is reversed with regard to phosphorus. Except when the animal is on productive work such as fattening or milking, almost whole of nitrogen supplied in the food in the form of protein gets released in dung and urine.

The first step in efficient preparation of farm manure is minimization of losses of urine due to various causes. The losses are mainly due to loss of urine in cattle shed due to the absence of any effort at collecting the same, loss of soluble constituents such as potash and nitrate in the manure, heap exposed to sun and rain and finally loss of nitrogen due to the hydrolysis of nitrogen of urea to ammonium carbonate as under



To avoid the losses, the cattle byre should have a stone or cement concrete flooring with channels leading to urine collecting ponds, where it could be stored and transported to the fields for direct application or to the manure heap. Litter and dry soil should be spread under the feet of the cattle as absorbing material, 5-10 lb. of litter per animal can be used. The absorbent material could be periodically removed and fresh material spread over the floor. In western countries straw is used for the purpose besides serving as a bedding material. It absorbs urine and retards its decomposition. It also adds on to the organic matter content of the manure. In our country straw is too valuable a cattle feed to be diversified for this purpose. Groundnut husk, fine dry earth, dried leaves, waste fodder when applied directly to the field can be used with advantage for absorbing urine in the cattle shed.

Application of chemical preservative like rock phosphate, superphosphate, dilute sulphuric acid, gypsum etc., to the byre helps to conserve ammonia. These chemical preservatives fix the volatilised ammonia into non-volatile compounds, thus it saves it from escaping into the air. Addition of 25.50 lb of single superphosphate would not only prevent loss of ammonia but also enriches the F.Y.M. in its phosphorous content. The losses due to wash out of soluble constituents can be prevented by providing a thatched roof to the manure heap.

A proper manure heap is essential for the production of good farm yard manure. Two important methods preparing the F.Y.M. are the i) Trench method ii) Plastered heap method. (Govindarajan 1950).

The advantages of these methods are-

- a) Labour economy

- b) Conservation of moisture, which facilitates proper decomposition of the material.

- c) Better quality of the manure

- d) Higher recovery of manure.



Trench method employs a trench of suitable dimension, depending on the farm size. Trench is filled in layers viz., a layer of refuse and a layer of dry earth, over this water is sprinkled and layers are built up till it is 2 feet above ground level. This helps in diversion of rain water. The advantage in their method, there is no need for turning in the material. The second method is adopted in places where the water table is high and it is not possible to prevent water from rising up. Here the farm refuse is dumped to form a square heap of about 6 feet sides. The outer sides of the large heaps are drawn to form a dome-shaped mound and this is plastered with earth and water or earth and cowdung plaster. In this method the material has to be turned in after a month or two.

A moist and compact manure heap makes for anaerobic fermentation preventing conversion of protein nitrogen material into gaseous ammonia. It also prevents oxidation and loss of carbonaceous material, which results in the lesser outturn of manures. This type of loss amounts to 15-20% even under best condition of storage and it may be 50-80% under inefficient wasteful practices so common in our villages.

Present day energy crisis has necessitated the use of organic waste for energy producing purposes. Here the dual purpose gobar gas plant comes handy. They provide fuel and also manure simultaneously by anaerobic fermentation. The resultant products are a mixture of methane and carbon dioxide, which is stored in a gas cylinder. The digested slurry contains 1 to 2% nitrogen.

F.Y.M. is a complete manure. Good sample of F.Y.M. may contain 0.7 to 0.9 per cent of  $K_2O$ . A ton of manure adds on the soil approximately 15 lbs. of N, 12 lbs. of  $P_2O_5$  and 30 lb of  $K_2O$ . Besides these it supplies well decomposed organic matter, which influences the physical and chemical properties of the soil. It promotes biological activity in the soil. If we accept the view that the animal excreta contains growth promoting substance or hormones, and the same are to be supplied to the soil, farm yard manure, is the convenient and practical source, of the same for the crop. Beneficial influence of FYM on soil physical and chemical properties are well known. In recent years Sarkar et al (1973) have shown that the structural properties of sandy loam soil of Hissar, materially improve with continuous application of FYM over a period of a year. Kanwar and Prihar (1962) have reported the beneficial effects of F.Y.M. on soil chemical properties. They noticed a substantial increase in N, P, K, Organic matter, C:N ratio, compared to control.



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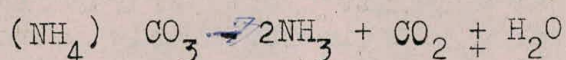
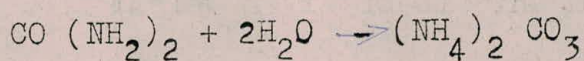
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A moist and compact manure heap make for anaerobic fermentation preventing conversion of protein nitrogen material into gaseous ammonia. It also prevents oxidation and loss of carbonaceous material, which results in the lesser outturn of manures. This type of loss amounts to 15-20% even under best condition of storage and it may be 50-80% under inefficient wasteful practices so common in our villages.

Present day energy crisis has necessitated the use of organic waste for energy producing purposes. Here the dual purpose gas plant comes handy. They provide fuel and also manure simultaneously by anaerobic fermentation. The resultant products are a mixture of methane and carbon dioxide, which is stored in a gas cylinder. The digested slurry contains 1 to 2% nitrogen.

F.Y.M. is a complete manure. Good sample of F.Y.M. may contain 0.7 to 0.9 per cent of  $K_2O$ . A ton of manure adds on the soil approximately 15 lbs. of N, 12 lbs. of  $P_2O_5$  and 30 lb of  $K_2O$ . Besides these it supplies well decomposed organic matter, which influence the physical and chemical properties of the soil. It promotes biological activity in the soil if we accept the view that the animal excreta contains growth promoting substance or hormones, and the same are to be supplied to the soil, farm yard manure, is the convenient and practical source, of the same for the crop. Beneficial influence of FYM on soil physical and chemical properties are well known. In recent years Sarkar et al (1973) have shown that the structural properties of sandy loam soil of Hissar, materially improve with continuous application of FYM over a period of a year. Kanwar and Prihar (1962) have reported the beneficial effects of F.Y.M. on soil chemical properties. They noticed a substantial increase in N, P, K, Organic matter, C:N ratio, compared to control.



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Mr. Shankaran, Entomologist - C. W. Inst.

Bovine manure - House fly breeding

Parasites attack flies & destroy them. Biol. control of flies

Electronic control - Sonic waves - Panama Canal



## APPENDIX

THE LARGER DIMENSIONS OF DAIRY DEVELOPMENT IN INDIA

After he had been Prime Minister for a relatively short time, Shri Lal Bahadur Shastri expressed to wish to stay in a village for at least one night. A modest wish, one might think, but hardly one to be welcomed by conscientious security men responsible for his safety. Nevertheless, when the Prime Minister came to Anand to inaugurate the cattle feed compounding plant of the Kaira District Co-op. Milk Producers' Union, not all of his convey took quite the route that had been published. Instead, it made an unscheduled stop; a diminutive figure transferred from a large limousine to a jeep-type vehicle and the convoy continued sedately to Anand, while the more homely vehicle proceeded more bumpily to the village of Ajarpura, where it deposited a delighted Prime Minister at a modest village house. Not a policeman in sight. Complete freedom to roam the village, to drink tea with farmers and labourers to get back, in other words, to what India is all about. Ignoring all Doctor's orders, the P.M. talked with the people till 2 a.m. and rose early next morning to talk with them again over a breakfast of tea and Chapati's.

When we reluctantly emerged from the village—and after a remarkable, earthy, contemporaneous address to the 40,000 cooperators who attended the inauguration of the cattle feed plant — the P.M. was not content to let the matter end there. He said that the Kaira Co-operative was all very well, but why were there not more than?

We told him that the Kaira Cooperative had already helped similar institutions to get going in Mehsana, Baroda, Surat etc. — but that it was difficult to see how the cooperative members' resources could do the job on a national scale. The Prime Minister replied that he felt that there should be an institution supported by the Central Government, set up for the express purpose of helping milk producers to organise their own "Anand S" in all the milksheds of the country. And so it came about that the National Dairy Development Board was born, with its Head Office at Anand. Not without some wrangling among the bureaucracy, it is true but

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Lecture delivered during the Sixth Lal Bahadur Shastri Memorial Lecture series at INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI (January - 1971)



that is a dimension of our dairy development with which I shall not attempt to deal today :- but rather, what I shall attempt here is to show something, atleast, of how the country is now trying to fulfill Shri Lal Bahadur Shastri's wish that there should be "Anand's" in all our milksheds - and how perceptively he envisaged the larger dimensions of dairy development which our country could there by achieve.

### THE FRAME WORK

First one must look at dairy development within the frame work of the country's total situation. Of course, it is true that we dairymen often have to speak as if dairying were in some way unique-but, for our purposes, here today, one must note the many characteristics that dairying has in common with other agricultural industries. It is important to recognise that dairying is an industry : even the most traditional approaches to the supply of liquid milk for our small towns, requires some organisation for transport, processing and marketing plus some investment in equipment. It follows that, since there is investment, some capital is involved and therefore-whether it be in the private, public or cooperative sector - some application of the concept of "return on capital" must also be involved. Moreover, even these simple "industrial" characteristics of dairying oblige one to bear in mind two more : the importance in dairying of demand supply relationship and the fact that, whether planned or unplanned, all industries must in some sense compete for investment funds.

Then also, like other industries, dairying can develop satisfactorily only if its development is consistent with that of the country as a whole. I am thinking particularly of rural urban relationship many so-called developed countries are proud of the fact that only, say 5% of their people work on the land in a few years time. We shall have an 800 million population - does this mean that we shall aim at having an urbanised population of 760 million, leaving 5% (40 million) on the land ? Surely not even if such a monstrous urbanisation were contemplated, we



could not find the capital for it. Thus, at least for many years the majority of our population will live in innumerable rural or semi-rural communities, where agricultural land is the major 'capital' from which most people derive their livelihood.

This widespread continuing dependence on the land has two practical implications for dairying (along with other agricultural industries) : one is that many people will continue to produce milk supply for their own families and at most, for their near neighbours -- and the other is that the effective demand for a modernising dairy industry's products will be limited to the demands of families who cannot better be supplied by their own or a nearby milch animals (plus, of course, any demand for exports).

Lastly, in ~~considering~~ the frame work within which our dairying must develop, one cannot ignore the fact that there is at present little that is idyllic about our dependence on the land. Most of the people who sigh the loudest that they want to "get back to the land" are the very people who are least likely ever to be obliged to do so. Unfortunately for those who cannot escape it, the land is too scarce, and often too unproductive--for it yet to provide most of our rural people with an adequate livelihood. This is the basis of our present rural poverty. Dairying--and in my opinion, all other agricultural industries -- cannot ignore it.

Thus the larger framework within in which one must view our dairy development has three main components :

- 1 : Dairying is an industry--but its development must also serve our rural and semi-rural population
- 2 : Planned or unplanned--public, private or cooperative in its development, dairying must compete for investment funds -- and
- 3 : Our dairying must develop in such a way as to contribute to the solution of the problem of rural poverty.



I believe that, if one accepts this framework, there are five larger dimensions of dairy development which must be observed.

1. The Institutional Dimension :

As in other areas of our national heritage, the main problem of our dairy development has not been that of knowing that to do; rather it has been that of knowing how to do it - or how to get it done. In practice, in our country as in others, only one institutional structure has proven effective in getting dairy development done that is a unified organisation of milk producers, which is responsible for procuring, processing and marketing its members' milk owned and controlled by milk producers and therefore responsive to producers' needs.

Such an organisation enables even the poorest producers to hire their own professional technical personnel and managers. It gives the producers command over the technologies which they require in order to market their milk to consumers who need it (as liquid milk and milk products). It also enables producers to invest in the facilities and services which they need in order to improve their milk production.

How does this work ? The structure is a familiar one : each village in the milkshed forms its own primary cooperative society. All such societies in the milkshed form a cooperative Union and this Union owns, manages and operates the dairy processing plant, the procurement organisation and the marketing system for its members.

But note that each primary society is managed by a paid (and, in this sense, a professional) Secretary. Each primary society has its own trained men to carry out on the spot artificial insemination of members' animals, to provide first-aid veterinary care for those animals etc. Because they are paid by the society, however modestly, these men have to do their work conscientiously they cannot claim the immunity of a remote, entrenched bureaucracy.



Similarly, the cooperative union has its own managers and technical personnel, paid by the members out of the margins earned on their milk. If they fail to earn the appropriate margins, the members will soon instruct their Board of Directors to get them removed.

When, however, the managers and technologists do perform, the producers find that they get a good price for their milk (plus a bonus at the end of the year) and they soon become keen to increase their milk production. And they soon become keen to increase their milk production. And it is here, I believe, that the institution comes into its own. The Union can own and operate its own cattle-feed plant-the members' primary societies are ideal retail outlets for such a product : members come twice a day to sell their milk, they are paid twice a day for their milk so they readily purchase their concentrate requirements, if necessary on a daily basis.

Just as the Union has the managerial and technical resources to operate its own cattle feed plant, so also can it organise intensive systems to provide Artificial Insemination services, veterinary services etc. for all members. At Anand, for example, the Union has over 40 professional veterinary doctors, it carries out some 2,00,000 artificial insemination services yearly. It markets lucerne seed yearly to its members, to help them grow some ten thousand of hectares of green fodder annually. ~~But~~ All this is one District only at no cost to Government.

Thus, as the organisation grows and gets a good return on its members milk, the members rapidly develop their interest not only in improving their milk production but also in improving the market for their milk. So they use their organisation to obtain the services of people who are professional marketers and the organisation becomes increasingly consumer-oriented.



## 2. The Techno-Economic Dimension

I have described briefly the two main effects of a functional institutional structure for dairy development. These are that it builds and effectuates the milk producers' interest in improving milk production, while also making it in the producers interest to provide consumers with the mix of liquid milk and products that comes closest to satisfying consumers preferences vis-a-vis quality and price.

Here one is speaking of an industry evolving technologies which observe economic criteria-in-fact, "techno-economics."

The Techno-economics of our modern dairying must achieve three objectives :

a. They must evolve consistently through the production procurement, processing and marketing phases of the industry.

b. They must benefit producers and consumers who do not come within the ambit of the industry, as such directly.

c. They must have built in self improving factors

This need for built-in self improving factors can be demonstrated by examining the present built-in "self-destructive factors" of our traditional dairying's techno-economics. Our milk production, for example, is characterized by milk animals which are inefficient converters and milk producers who are too poor to acquire improved animals. It is not worthwhile to feed inefficient animals well - so they continue to produce little milk and thus the milk producer remains too poor to acquire a better animal ( and, in fact, the inefficient animals tend to multiply and



deteriorate, generation by generation) : this is the built-in self destructive factor on the production side of our dairying.

There are similar, self-destructive factors built into our dairying's traditional approaches to milk procurement, processing and marketing. This is precisely because our traditional milk trade has had a long time to balance a stagnant milk production against a surging demand (in the major cities, milk and milk products account for 9.13% of most consumers' expenditures).

In the face of a widening gap between production and demand the traditional trader extends and cheapens liquid milk by adding sugar, water, rice, flour etc. (which we proudly call "dilution") - and to be prepared for the lean season he frequently tries to accumulate stocks of ghee, mawa etc. during the flush season (which we proudly call "hoarding"). The traditional trader earns handsome margins for these dilution and hoarding functions - but, really, he is doing only what the system requires of him even though it makes our dairying self destructive and this is why the technoeconomics of our modern dairying must reverse such self destructive factors.

To achieve this reversal, the key is the constance of change (throughout the production, procurement, processing and marketing phase of our dairying) - and, of course, the major criterion through out these phases is "productivity" in the use of resources, in the use of capital. Hence the use of producers oriented institutions, to enable poor milk producers to acquire milch animals which are better converters and which make their family's labour more productive.

Similarly, in the processing and marketing phases (which have to be considered together), we have to evolve "Systems" for bringing milk and milk products more efficiently to urban consumers. For example, our present practice of building palatial Western-style urban dairies in



cities, where demand is less than 100,000 litres is too costly; it makes the modern dairy industry less competitive than even with the traditional system. Hence our current efforts (which I believe are on the brink of success) to evolve a system known as the bulk-vending system which would enable several such cities to be served more economically by a single larger dairy, we have yet to evolve such techno-economically improved systems for milk products such as ghee and I shall discuss this need briefly later.

Meanwhile, however, let me illustrate the third achievement which I mentioned as being required of the new techno-economics of dairying: namely, that they should benefit producers and consumers not directly within the ambit of our modernising dairying industry. Take the cross-breeding programmes which are being instituted in the selected milksheds, for example.

In effect, these programmes will encourage the rearing of more improved heifers than the producers will wish to retain. They will keep the best (which will enable them to take in advantage of the better feeding and management available in the milksheds) and they will sell off the rest, which will thus be moved into the non milkshed areas, where they will be considerably better than the existing milch herds, to the benefit of the milk producers in those areas and the consumers they serve.

Thus, in fact, the programmes for cross-breeding and upgrading milch animals in the milksheds will result in the multiplication and distribution of improved animals in ever-widening circles of increasingly improved productivity. This must be the "trigger" which sets off a built-in change toward increasing productivity throughout our developing dairy industry.



### 3. The Industrial Dimension

However, several isolated projects undertaken so far to produce crossbred animals in our milksheds have made little impact, partly because they are isolated efforts. Most of dairy modernisation/cannot be achieved in small "Pockets". The industrial infra-structure required can be sustained economically only if the scale involved is rather large. This ~~infrastructure required can be sustained economically only if the scale~~ is of two distinct kinds : that which is of a general industrial nature - and that which pertains to the food industry in particular.

The general industrial infra-structure required involved factories to produce veterinary immunological and biological products, factory-scale production of frozen semen and factories to produce the equipment that is needed for efficient milkprocessing and marketing. Nor is this just a matter of copying similar factories of Europe and America, whose availabilities of capital, stainless steel, human skills etc. are quite different from ours. We have not only to build new kinds of categories, but these must embody systems, processes and approaches to marketing which are designed expressly to enable us to serve our producers and consumers.

The second part of the Industrial infra-structure required is the building of what we usually think of as "dairies". However, our experience shows that, while some storage and processing facilities are needed, it is certainly not appropriate simply to copy the dairies of other regions where dairying products are propagandised as something almost magical, rather than a simple and wholesome food which they should be.

In future we must build "food factories", rather than things which, because we call them "dairies", must be reserved for the lactic secretion of the cow, even at the cost of very poor utilisation - and these "dairies" which are also "food factories" must be used simply to produce as much wholesome good, value food products as possible.



This relates to the new-techno economics which I outlined earlier. For example, most ghee is diluted in varying degrees with Vanaspati, to enable the traditional sector to provide consumers with a range of mixed ghees at an appropriate ~~range-of~~ range of prices. If our modernising dairy industry were to provide consumers with similar "vegetable ghees", properly labelled, consumers would know what they are paying for; these modern ghees would be both safe and pure and the majority of consumers would be far better served. (and the nation's investments in processing facilities would be far better utilised). Thus, we must structure the techno-economics of our modernising dairy industry so that it increasingly offers products which taste the way that good foods should at the best possible prices, regardless of whether we make them with 10% milk solids and 90% vegetable solids or vice versa. Properly marketed, these products would rapidly find consumer acceptance, because at better prices than the products which most of our consumers are now compelled to buy from the traditional sector.

There are many such examples of how the desired techno-economics of our modern dairy industry indicate the industrial dimensions that the industry ~~indicate~~ must assume. However, I hope, I have said enough simply to establish that there are two industrial aspects which have to be looked after (namely, the production of processing equipment, technical inputs etc. - and the establishment of processing facilities which will increasingly integrate dairying with our modernising food industry as a whole) and that this industrial infrastructure must complement the institutional and techno-economic development of our modern dairy sub-sector.

#### 4. The Dimension of Technical Modernisation in Rural Areas

I mentioned in my introduction to this Lecture that I do not believe that we can or should aim (in our life-time, at least) at a society wherein only, say 5% of our people will be directly dependent on the land. Not only



have we insufficient capital to create the number of industrial jobs that this would require - but I suggest that we also have not the social capital. No society has.

We have only to look at the racial tensions of many European and American cities, at the appalling neglect of the aged throughout the West. etc. Considering the inability of so-called "developed" societies to cope with mass urbanisation, it is not surprising that our own cities are becoming bellholes and one can not wish the majority of our people to be obliged to live in such places.

Instead, one has to face up to the fact that our rural/urban priorities must change. While trying to make life for those who do have to live in our cities, socially and physically secure, we must also try much harder to see to it that the majority of our people can live in a rural society which will offer an increasingly satisfying and productive experience.

A food industry such as dairying has to deal with this task on two levels :

First : There is the fact that, we need good food in order to make the most of our lives. Those of us who influence the modernisation of any part of our food production, processing and marketing, must see to it that our people get the food they need. This sounds elementary, but it is disturbing to note how often people talk as if a man can eat something that is called a "Rural Labour Project", or even an "Intensive cattle development programme". Those of us who are responsible for the agriculture food sector really have to discipline ourselves to eschew such evasions.

Only if this need for good food is accepted, then it is our duty also to consider that man does not live on food alone : we have also to create what I have referred to as the "Social Capital" which will enable our majority to lead an increasingly productive and satisfying life



in rural communities. There is nothing unreal or intangible about this dimension. It calls for nothing less than the technical modernisation of rural society.

Taking the example of dairying, consider the fact that one third of our Districts are potential areas for efficient milk production. This means that a modernising dairy industry, based on organisation owned and controlled by milk producers, implies nothing less than the build up of institutions which can reach into the heart of even the smallest villages in one third of the country.

Consider what this means in a village where the majority of its people own a milch animal, when they find what there is now an organisation which enables them to employ a literate man to manage their business, that this organisation really does pay them the fair and declared price for their milk and even that the same organisation can enable them to employ technical people who will really work for them to help them improve their milk production : veterinary doctors, green fodder specialists etc. At the same time, they find that, if they wish to market more milk this way, they can also get their processing plan expanded, they can hire people who will work to evolve and market products which give them a better return on their milk.

What does it do to their lives ? They find that they are all "economic equals" that they can each take their turn regardless of caste when they line up to sell their milk and that milks of the same quality fetch the same price, that milk has an "objective value". They find that the remote and perhaps "civilised" sciences can help them to use such very practical technologies as artificial insemination to improve their milk production. Thus, technical modernisation enters into their lives via the new institutional structures which I mentioned earlier.



The industrial dimension which I have mentioned are also essential to this technical modernisation. The producers' processing plants become focal points for modern rural industries with which the producers identify, such as cattle feed plants, small scale industries making milk testing equipment, containers for semen for artificial insemination etc. Thus, on the one hand, agricultural production becomes more viable through the modest and practical application of modern technology and at the same time more "industrial" jobs are created, both directly in the producers own organisations and also in the burgeoning industrial infra-structure.

Moreover, once a given group of milk producers has an institution capable of making, say milk powder - then it is only natural for the producers to ask why they cannot process and market, say their paddy in the same way. They find that the by-products of a modern rice mill can be used efficiently by their cattle feed plant. Perhaps also they find that their milk powder and their cereals can be combined into whole some milk beverages, the marketing of which gives them a better return on both their milk and their cereals (and which, I may add, certainly gives consumers of such beverages better value than they now get from such products.

Thus, relatively simple programme for improving milk production, integrated with the provision of the necessary processing and marketing facilities, can become a spring board for the technical modernisation of the vast rural areas involved. Milk producers find that modern technologies can help them and that they can obtain the services of technical and managerial people to enable them to apply these modern technologies to an increasing range of their agricultural produce. Moreover the industrial infrastructure which supports this modernisation provides an increasingly wide range of jobs within the region. Thus dairy development can set in motion the "technical modernisation" of our rural areas, making life for our rural majority more reproductive and more satisfying without the excessive urbanisation which has engulfed the West and which we must avoid.



## 5. The Social Dimension

I have tried to show how technical modernisation can be the "means" for improving the lives of our rural majority but it is of course, certainly not the "end". Such modernisation is the erotically neutral in its social content. It is up to us to see that, its impacts on our people's lives are socially desirable. We have already found that the institutional structure, if properly built, can provide its rural participants (in our case, milk producers) with an experience which shows them how they can set up organisations wherein the socially disadvantaged people get a fair deal. Each participant finds that he can line up to sell milk, without any particular caste or community taking precedence - and that this institution can be the means of achieving other kinds of change in all walks of life.

The milk producers' society, for example, can accumulate funds for the village of build a road which connects it to the route followed by the milk truck. It can help fund the building of a primary school, a domestic water supply or even a clinic or library.

These can be said to be social extensions of the technoeconomics of a modernising agricultural industry. Such extensions are, however, much wider in their implication : for example, if a poor producer observes that you get a better calf if you give better food to a pregnant cow even though she is dry, then that producer soon extends this experience to the idea that, if a human mother gets better food, she produce a healthier baby.

If a veterinary doctor can use modern medicines to cure which milch animals, then it is even more logical to seek ways whereby doctors for humans can use modern medicines to keep our infants healthy. If artificial insemination demonstrates that the reproductive process can be controlled to as to produce healthy calves when desired, it becomes more logical that human conception could be controlled when desired.



In other words, "technical modernisation" does not proceed in isolation. In fact, it cannot proceed if it is confined to technical factors. It can proceed only as what we can call a process of "social modernisation" also proceeds, where by rural people find that they can increasingly command modern science and technology to achieve their social objectives.

## 6. Conclusion

I will conclude with a short summary.

I have tried to show briefly what I believe to be the larger dimensions of our dairy development. I started by pointing out that, to achieve this kind of change an appropriate institutional structure has to be built up, which is owned and controlled by the producers concerned and is sensitive to their needs. This institutional structure can identify and effectuate the techno-economic changes which must be made, in order to move from a low-productivity high margin traditional dairy structure to a modernising one which enable milk producers, processing and marketing to become increasingly competitive and efficient. This of increasing the dairy sub-sector's productivity leads to a rational build up of the industrial infrastructure, including not only processing and marketing facilities for milk and milk products, but also the industrial units required to produce the equipment and technical inputs of a modernising dairy industry.

I want on to outline how this process of modernisation really implies the beginning of the technical modernisation of our vast milk shed areas and that this modernisation is larger than one might think in two ways : namely that although it may start through dairy development by handling milk and milk products, it can and should increasingly embrace the major crops of the producers concerned. This process of modernisation cannot merely demonstrate to producers the application of such techniques as artificial insemination, improved animal feeding etc.



On the contrary , it inevitably shows the producers that they can use modern science and technology to achieve the larger objectives of their lives.

Thus, I concluded that the ultimate end of such developmental programmes is not the more or less mechanical modernisation of the production of a give food, such as milk, but it is rather the beginning of the process where by our rural majority can get command over their future and build themselves a richer and more satisfying community.

These are the dimensions of dairy development, I believe, which our first Prime Minister saw when he came to open the first dairy at Anand. He was accompanied by his daughter, our present Prime Minister - and I believe that she remembers it too, because she also has been insisting that we should multiply the Anand pattern, in order to involve the people of all our milk sheds of their own development.

And, as I said when I started this lecture, this is what Shri Lal Bahadur Shastri saw, when he stayed at the village of Ajarpura. These are the dimensions of the job which the country is trying to achieve and I am happy to be able to take this fitting opportunity to record here Shri Lal Bahadur Shastri's role in helping us to initiate this programme of development within our rural society.



### THREE STEPS IN RURAL WORK

#### First Step

What we have to try first is to change the climate of defeat that prevails in the villages specially among the lower economic strata of the society. No uplift will ever take place unless the psychological status changes from that of diffidence to that of confidence. This is necessary because the havenots have suffered reverses all through the ages and so have lost all sense of initiative. This has to be nursed back by handling with great skill and understanding. Once the self-confidence is revived and they made to feel that their efforts can lead to change in the level of their living, only then they can make use of the opportunities created for them. In this change in the mental make up, even small techniques could help them psychologically. A ball-bearing in the pulley to reduce the drudgery of the woman who draws water from a deep well, water-proofing of the wall and fire-resisting of the thatch-roof of the mudhut in which the poor family is living for generations introducing ovens which take less fuel or give no smoke or are run on cheap solar reflectors, improving their environs by sanitary conveniences as can be afforded by the poor and such other things, even if they may not bring significant economic gain to the poor, will inculcate a sense of self-respect and a confidence that even their lives can be changed. This will prepare them to accept further changes and evoke initiative necessary for accepting innovations and new techniques.

#### The Second Step

Simultaneous to the above the second step is to assure that the last man in the community is looked after. It should be endeavoured that at least there is none in the village who has to go to sleep without food. Unfortunately, today there are, in poor districts at least, 8-10 families in a hundred who have to go without food for more than 15 days in a year. They are hard working people yet to whom the society is not able to provide any work on all days. To begin with (till agro-industries develop to remove this lacuna) some social security will have to be provided for such people. The Gram Sabha or the community through its school & some other leverage must have some work provided for them. Spinning on an improved spinning wheel at a proper place could be one such device. The wages thus paid will equal only to a dole and the less is the number of people who avail of it, the better it is. At least one-third to half of the wage of an agricultural labourer must be made available to him on days when he/she is without any sustenance. This will be like a life-belt thrown to those drowning in the economic sea. Without this relief being planned we cannot rest assured that willing hands denied work, do not suffer hunger hunger. Along with spinning other labour intensive community employments will have to be devised.



### The Third Step

The third aspect is, of course, the introduction of new modes of production. The old village industries are important and must be given all help but they serve a limited number of traditional artisans and cannot, even if revived and improved, absorb the new hands whom agriculture cannot provide work. These are to be given work through industries which need to be fashioned out of a thousand and one inventions, innovations and techniques evolved in laboratories of our land and abroad using the raw materials, skills and energy sources that can be made locally available and yet produce goods so far unknown. The straw, the minerals and the earth can be put to various products. The agriculture produce needs to be processed and the fruits and leaves can also be converted to innumerable useful articles. The gap however is between the known techniques and their conversion into occupations fit for the rural people. The constraints apart from physical are psychological too. The poor man has never worked on his own responsibility. The whole educated unemployed also know no entrepreneurship. To overcome this great failing a mechanism will have to be evolved in which those in the field of business and industry can play their part.

Thus (i) small amenities to inculcate hope among the hopeless (ii) some social security among the weak to avoid hunger and (iii) introducing new avenues of production to make the unemployed take to new self employed occupations, seem to be a right line of strategy for rural change. The total productivity of the village and other necessary improvements should be subservient to the prime task of 'Banishing Poverty'- the objective which rightly should be the slogan of the nation.

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## Technology Relevant to Times

(Devendra Kumar) \*

Technology and economics are inter-related. The kind of technique influences both the economic pattern as well as the cultural matrix. Artisans and small craftsman with decentralized method of production and local consumption for self-sufficiency was originally the norm. Gradually the advent of inanimate power as motivating means of production brought about change in the technology and consequent change in the economic order. The wind-mill and water-mill belonged to inexhaustible and comparatively universally available inanimate sources of energy. The manual and animal draught power however still reigned supreme. But with the use of coal through steam power to generate motive force for production brought about the beginning of the Industrialisation age. The concentration of production units started in spots where such energy was easily available. The changing pattern of economics towards mass production in place of production by masses held its sway. The conglomeration of human population in the industrial towns along with the decay of the village economy and "the deserted village" began with the rise of the megalapolis. The change, from manufacture for a small area of consumption, to a larger and larger areas of marketing even in goods of primary needs proliferated. The birth of industrial empire, and political and military support for the same brought the age of imperialism. As a result we saw the clash of competitions leading to two Great Wars for capture of markets of finished goods and sources of the raw materials, mainly the mineral resources of the world.

The progressive depletion of the natural resources leading to a realisation of the limits of non-renewable resources, the labour employer difficulties in the highly mechanised and centralised system of production, the monotony of existence and lack of means of expression to those in production lines and psychological strains on the atomised individual, these and many other crises face today's man. These conflicts are (a) between the interests of man and that of nature (b) between the needs of men, the individual and that of society - the collective and (c) between man's material satiation and his spiritual needs. These problems are the creation of harnessing of technology for the fulfilment of man's avarice and his insatiable lust for power. Now however, a critical stage seems to have arrived and a revolt has set in the human mind against this traditional role of technology being used for profit, power and plunder.

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\* Director, Centre of Science for Villages, Wardha



ROLE OF INDUSTRIAL HOUSES IN HELPING  
IN RURAL DEVELOPMENT

(Devendra Kumar \*)

The role of industrial houses in increasing the total wealth of the country has to be supplemented with the activities by which this wealth is distributed among the most needy of the land. The projects of rural development to be undertaken by the houses with the above purpose should, however, be a little different from those of the other voluntary agencies. The process of financially assisting the welfare agencies in rural development is a philanthropy which is going on but what we need is the direct involvement of the industrial and/or business houses in the rural work projects, so that the special potentialities of the houses are given expression in the same. If the know-how, the technological facilities, the entrepreneurship and the management expertise available with these houses are not utilized in the project they undertake in the village, what new contribution can we expect from them except of adding to the number of welfare agencies already in the field. To add a qualitative dimension to the rural scene the 'houses' should plan their role properly. Here are suggestions which could be of help in this.

Choosing the SITE :

Firstly the area to be chosen for such a work should be where the industrial unit has some previous connection and where it can be looked after by the principal person of the industry. The personal involvement of the head is very essential for getting the right results. The whole concept of social work by industry is based on the principle of bringing nearer the classes and the masses. This is with a view to see that the talents and goodwill of the high ups is utilized for the last and the least. The effect of such an effort will be two sided. It will benefit those amongst whom the work is being done, at the same time affect those who are working there. The interface of industry and the village will lead to the improvement of the knowledge of both. Thus, in the choice of the area the following points could be of help :

- (a) The area should be such where the principal people of the industry could give direct attention and be able to participate in it for at least once in a month.
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**1.1 Solar Energy :** The problem of fuel is becoming progressively acute in the villages. The poor families have to hunt for fuel for cooking spending large part of their time. The dwindling tree wealth is also threatened because of lack of alternate fuel source. Here the abundant solar energy available for at least 2000 sunny hours yearly can come to our rescue. The following experiments can be tried in various areas and improved upon.

a) Solar Cookers have been designed by many agencies and need to be tested and tried in the field. Sri Arvind Pandya - Sabarmati Ashram, Ahmedabad has designed an insulated box with mirrors reflecting sun from six sides costing Rs.500/- and attaining temperature of 220°F enabling cooking and baking. A simple device made at Bardoli Ashram, Dist.Surat is still cheaper. The latest one has been made by Mr.M.Von Oppen of the ICRI SAT, Hyderabad, where a paraboloid shaped pulp basket made indigenously and pasted inside with silver paper is used to focus sun's rays. The 'solar basket' costing less than Rs.50/- can boil one litre of water in 5 minutes, cook rice in 10 minutes and 'dal' in 20 minutes. This has great potentialities.

The Brace Research Institute, Quebec, Canada has evolved a solar steam cooker which can be indigenously fabricated even at the village level. The cooker consists of two parts which are rigidly joined to each other. The first is a solar collector that is a metal surface heated by the sun, causing water to boil to produce steam. The second is the insulated steam cooker, in which the food containing saucepan is placed. Steam is produced within an hour of sunrise and continues to be produced throughout the sunny day. Thus, it is possible to cook both the mid-day meal and the evening meal. Food left in the cooker remains hot for several hours after sunset.

b) Solar Water Heaters have also been designed by many agencies. Central building Research Institute, Roorkee has one costing Rs.620/- (1968 price) for an average family of five persons giving 140 litres of water at 50°C. There is another design developed at Arid Zone Research Laboratory, Jodhpur. Simple solar water heaters are popular in Japan and the design can be adopted in Indian conditions.

The McGill University, Canada, has developed an inexpensive design suitable for domestic and agricultural purposes and can be made from easily available low cost materials. It can provide 30 to 40 gallons of hot water per day at a temperature of 130°F to 140°F. The absorber is



# A P P E N D I X

## TECHNIQUES APPROPRIATE FOR THE VILLAGES - SOME IDEAS

(Devendra Kumar \*)

The business and industrial houses should chose techniques evolved by the laboratories in India or elsewhere which have the following potentialities :

- (a) they benefit not the upper crust but permeate to the lowest strata,
- (b) their application can be replicated as universally as possible and which do not require special circumstances and resources not possible to mobilise everywhere,
- (c) they bring new avenues of employment and income to the poor in the villages and
- (d) they are in consonance with the principles of ecology. In short, both social justice and natural balances must be served through the new technology we are after.

The problem is that the techniques available as may be fulfilling the above conditions are to be converted into economic propositions in the villages. This the scientist is incapable of doing. The bane of the rural economy is that it has no avenues of enterprise, trade or employment except what agriculture or dairying/poultry afford. Unless we bring about viable processes of production which can employ the people and for this evolve hundreds of trades and professions unknown earlier, no dent will be made on the economic life of those living below the poverty line. Thus converting the processes found out in labs to professions and techniques into trades of the village people is a challenge which is a fit one for the ingenuity and expertise that the business and industrial world possesses. It is this call that should be heeded and each 'house' could devote itself to present one particular new industry for the villages. It will, no doubt, require adequate amount of inputs in talents, organization and finances but the results will be far more rewarding than any thing else the 'house' may have done. Basically it is to stimulate thought in this field that as rough illustrations some techniques are being listed in the following four areas :

1. Use of new energies.
2. Manual and bullock power.
3. Rural Housing
4. Use of new raw materials.

1. USE OF NEW ENERGIES : This fact that the rural India suffers from a great vacuum in the sphere of energy is basically the cause of the backwardness and poverty that prevails there. How to meet this out has been tried by many innovations. Here are some of them.

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constructed from corrugated galvanised steel sheet of standard roofing material and a sheet of 22 gauge flat galvanised steel rivetted and soldered together and mounted high to be exposed to the sun.

1.2. Biogas : With about 23 crore cattle population producing daily 1.3 lac tons of wet dung the biogas is a rich source of energy. The estimate is that if biogas is got from all the cowdung and the human waste in India we could get heat equivalent of 92 crore tons of coal or 6.5 crore tons of petrol. The fertilizer that we will get over and above the fuel gas, even if we use only the portion of cowdung that is today burnt as fuel, will be equivalent to six times the annual output of the Sindheri fertilizer factory.

The Khadi Commission has developed a gas plant costing Rs.5000 which will give 10 cubic metre of gas everyday and yield 50 tons of fertilizers in the year. Immediate potentialities lie in harnessing this wasted source of energy.

1.3 Wind power : University of Massachusetts, school of engineering has experimented in the direction of a very large system using large number of wind generators, complete with some storage sub-system, as alternatives to combustion power plants as well as nuclear power plants. A wind turbine system capable of delivering 27,000 KWH of heating energy is being built. The use of wind power of sea and shores to convert sea water and air into nitrogenous fertilizer is being worked on. The use of small wind pumps to improve irrigation facilities in poor countries is being tested there.

A wind machine for pumping water was developed by a Finish Engineer S.J. Savenius in 1925-28. Based on this a vertical shaft rotor design has been perfected by the Brace Research Institute where in 45 gallon oil drums are bisected lengthwise and welded together to form two troughs. These two troughs are mounted between two end plates, made from 1/2" plywood 48" diameter. This rotor is cheaper than the windmill and has very little maintenance to be done. It operates in wind speed of 8-12 mph and above and can pump water from a depth of 10-15 ft.

The West Bengal State Electricity board has developed a design of wind mill to generate power to be installed at Sagar Island and Basant (24 Pargana).

The National Aeronotical Laboratory and the Indian Institute of Science at Bangalore have devised and developed many models.



2. MANUAL AND BULLOCK POWER : The animate energy on which the whole rural economy depends needs to be scientifically studied and its more efficient utilisation found out. The man and the bullock power has not so far been looked at something to be improved upon. Evidently this is a lacuna which must be removed. Some illustrations of work in this direction are given below :

2.1 Water pumps by manual energy : The poor people, who cannot afford to energise wells and sometimes do not even have bullocks subsisting on the small holding they have, are left high and dry with the present techniques taken to the villages. For them the following techniques of a foot pump and Hand Pump cylinder has been perfected in Senegal Mr. Guercult and are in daily operation for 18 months for irrigating a market garden in the suburbs of Dakar. The foot pump can lift water from the depth of 20 meters @ 1.2 cubic metres per hour. The foot pump is three times more efficient than hand pump. The super structures of both pumps as designed use steel angle bars but the same could be done by a good carpenter in wood as well. The use of ball bearing however cannot be substituted locally.

2.2 High speed gear : Attachment for bicycles has been evolved at the Regional Research Laboratory of the CSIR at Jorhat (Assam) which can increase the speed by 2 time or more. This mechanism could greatly reduce the strain on cycle - rikshaw pullers and be utilised in other cycling arrangements utilizing manual power for traction and transport.

2.3 Bullock power : Modernization of Bullock cart can help 15 million animal drawn vehicles of India with a total investment of 3000 crores and employing 1.6 million people.

3. RURAL HOUSING : The processes which will help the poor.

3.1 Non erodable mud plaster : The common mud plaster applied to cover the mud walls of a village gets eroded during monsoons. Experiments made at CERI Roorkee have found out a method to make this plaster non-erodable and water proof. This technique if taken to the villages will help the poor very much and also give some of them a source of employment.

Now mud houses fall down due to excessive rains and the outer walls, hit directly by rains is to be plastered again and again requiring much time and energy. This tells upon the earnings of the hut dwellers. The following process which gives 5-7 years of life to the water proof exterior of the mud wall at an extra cost of Rs.6 to 10 for 100 sq.ft. area is found very useful.



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- (c) Each village centre chosen should have one key village (Mandi village) and the attached small villages that is one 3 to 5,000 population, big village along with 8 to 10 small villages of 500 or less population. Thus, one village unit of this type will be of 8 - 10,000 population and should be termed as one centre. The number of such centres to be taken up will depend upon the scale of work undertaken. Usually, one centre in one type of villages would suffice. If more centres are to be taken up they ought to be in different regions.
- (d) In the choice of villages a special point to be remembered is that best results would follow in a village where some agency or person who has already established a rapport with the people and the work started in conjunction with such an agency will be more cost effective.

SIGHT behind the project :

The activity to be undertaken should not stop at bringing some benefits to the served locality alone, but be able to bring out the solution of some basic rural problems, the results of which could have application elsewhere also. It needs to be stressed that what is done must lead in evolving of a pattern which could be replicated. For this the following points may be of value :

- (a) The inputs which are brought in, in a particular region - apart from those required for exploration and experimentation - should be so managed that similar facilities could be made available in other villages of the region or other parts of the country.
- (b) The project should act as a starter for bringing about change in the moribund state of the village leading to its integrated development.
- (c) The activity must have some relation with the kind of industrial activity of the sponsoring body. This will enable the industry to make use of its special talents in giving the rural economy a new turn. The success of such rural development projects by industrial houses will be judged by how their involvement has been able to break the stalemate which has continued in the rural front despite various efforts in the field during the last half century.
- (d) It is suggested that the role that the industry can play most in this field is that of identifying, adapting and introducing new techniques appropriate for improving the rural economy. This should bring new hope amongst those who have lost all hopes.
- (e) It is therefore to be seen that the efforts made, go in to help the poorer people in the village more than those who are comparatively well placed. This is, because invariably all new technologies assist the affluent and lead to a still greater economic stratification of the society. This point needs special care.

If even one new techniques could be adapted and introduced in the rural economy by a business house it will go a long way in changing the village scene. It is a patent fact that the villages if they continue to remain only agricultural and the cities maintain to have all the units of production of finished goods, the economic slope towards the cities will continue to perpetuate the exploitation of rural by the urban



economy and at the same time compel the push of the rural population towards urban centres adding to the slums in cities. To obviate this situation it is necessary that a certain level of agro-industrial economy is developed in the villages. It is in this special sphere that the industrial houses could assist. The problem is very challenging because of (a) the lack of money, (b) absence of trained people, (c) insufficient structure and (d) very little entrepreneurship, in the villages. These cannot be met with unless all the forces at our command are organised. The transference of new techniques will lead to following results :

- (a) The new technique will bring amenities not so far available and thus give a psychological boost to the total rural population, enthusing them to take up to newer methods of production.
- (b) It will give new avenues of employment to many kinds of people in the village.
- (c) It will enhance the wealth of the community and the economic strength of the last man.
- (d) It will arrest, to some extent, the erosion of talents from the village to the city.

For fulfilling the above task the scientist, the industrialist and the social worker is the trio which must work together as mission arises.

INSTANCES TO CITE :

With these suggestions in rural development work about the site and the sight let me cite some instances of technologies and techniques selected from the published results of technological laboratories. These techniques are randomly taken from only four fields of rural technology and are only illustrative. Both in range and numbers they can be multiplied. The four categories given in the attached appendix are :

1. Better use of manual and bullock power.
2. Use of New Energies.
3. Techniques in Rural Housing.
4. New uses of village raw materials.

In some of them greater details have been given while in others only mention of the process is made. There are a thousand and one such techniques which could find ready application in the rural economy but are waiting for agency with the necessary skill and motivation. Let us hope that the industrial houses will provide the lead in this pioneering effort.

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The Post War Era, over and above the other crises, began with the threat of a Nuclear holocaust. It has now become necessary to search for an alternative technology whereby the above maladies which tend to increase the quantum of conflict and violence in the total system could be remedied. Hence man is now finding that the principles enunciated by Gandhi in this regard have begun to find greater and greater relevance. The principles of new economy of peace and non-violence as applied to technology relevant to modern times are :

- (1) Self-Sufficiency : The greater the magnitude of intensity of a particular need, the more easily should its fulfilment be obtainable in space and time i.e. the degree of self-sufficiency in a particular commodity will be determined by its degree of necessity. The less the degree of requirement of an article the greater could be the area from which it is fulfilled and vice versa.
- (2) Decentralisation : The economic, political, social or any other human system must be as decentralised as possible to give freedom to the components to evolve themselves in diverse forms and be able to interact to enable greater evolution and efficiency.
- (3) Villagization : The village, being that form of habitat for humans which affords him the closest communion with his decentralised units of living, to be preserved, promoted and evolved in the light of the newer knowledge of science. The city makes both the distances between man and man and also man and nature greater.
- 4) Motive Power : The motive power for production be in the order respectively of manual, animal and perennial sources like wind, water, solar, etc. and only in extreme necessity the non-renewable resources like coal and petrol etc. be used.
- (5) The fulfilment of human needs and the productivity in Nature be balanced and as a bee's requirements are met in a way that helps nature to prosper rather than be destroyed by it, so also should be the case with human consumption techniques. The mineral resources are trusts given to us for the generations yet to come and so should be utilised with that attitude of mind.
- (6) Distributive Justice : The production and distribution pattern be such as to avoid concentration of wealth. To remove disparity, the mode of first allowing the wealth to be produced at one place and then to make the distributive justice prevail, requires power of the state to be concentrated. In its place the production system itself be decentralised as to have an in-built mechanism of equitable distribution of wealth.



(7) Wiping out disparity : Traditional trend of technology which has helped to increase production in a geometric progression by assisting the strong to become stronger has created a great economic gulf between the affluent and the Third World countries - the industrial cities and the agricultural raw material producing villages. This trend must be reversed to strengthen the weakest link in the economic chain. Thus, alternate technology has to be found out by the most sophisticated scientific knowledge reacting with the problems of the poor of the world and evolving processes which will preferentially assist them more than the rich.

(8) From Passivity to Activity : The mode of production be such as to give freedom of expression to the individuals engaged in it. Instead of the machine being man's master, he should be the master of machine. It is expression in creativity in various fields which makes man's life worth living, in its stead if his passive role predominates both in the production system as well as a consumer degeneration sets in in all other fields. To correct this order new techniques have to emerge.

(9) Balanced Inter-dependence : Inter-dependence is a law of life but when this inter-dependence is not balanced and A is more dependent on B than B on A, B will tend to exploit A. Hence the mutual dependence of A and B should be made balanced. This will require evolving techniques to correct such imbalances wherever they exist. Even with best of intentions wherever there are regional imbalances or inter-personal imbalances exploitative trends are bound to develop. This needs to be removed by bringing back the balance.

(10) Labour intensive techniques : The techniques be labour intensive rather than capital intensive so that they can be in the ownership of the producers themselves. This can happen only when they have the capability to pay back the capital locked in the machines at their earliest. Such units of production will have a higher replaceability quotient among the poor sections of the community and provide benefit of earning to a larger number. The intensity of labour employment will vary from industry to industry but in more recurring and materially consumed commodities more labour intensive techniques will be needed.

These ten principles of the new economics which determine the direction of the technology, give the orientation to science towards the spiritual needs of man. Vinoba Bhave has rightly summed this up in his Mantram 'Sarvodaya = Science + Spirituality, meaning unless the power of science is given the direction of spirituality, 'Sarvodaya' i.e. total welfare of all will not be possible to be achieved. Science therefore must be given a new orientation from its current direction of using the environments for the narrow self interests of the immediate times without due regard to all the dimensions of space, time and spirit. This is the new orientation for which Gandhi stands. Let us see how, we in India can help the world in realising the balance which it has miserably missed.



### THREE STEPS IN RURAL WORK

#### First Step

What we have to try first is to change the climate of defeat that prevails in the villages specially among the lower economic strata of the society. No uplift will ever take place unless the psychological status changes from that of diffidence to that of confidence. This is necessary because the havenots have suffered reverses all through the ages and so have lost all sense of initiative. This has to be nursed back by handling with great skill and understanding. Once the self-confidence is revived and they made to feel that their efforts can lead to change in the level of their living, only then they can make use of the opportunities created for them. In this change in the mental make up, even small techniques could help them psychologically. A ball-bearing in the pulley to reduce the drudgery of the woman who draws water from a deep well, water-proofing of the wall and fire-resisting of the thatch-roof of the mudhut in which the poor family is living for generations introducing ovens which take less fuel or give no smoke or are run on cheap solar reflectors, improving their environs by sanitary conveniences as can be afforded by the poor and such other things, even if they may not bring significant economic gain to the poor, will inculcate a sense of self-respect and a confidence that even their lives can be changed. This will prepare them to accept further changes and evoke initiative necessary for accepting innovations and new techniques.

#### The Second Step

Simultaneous to the above the second step is to assure that the last man in the community is looked after. It should be endeavoured that at least there is none in the village who has to go to sleep without food. Unfortunately, today there are, in poor districts at least, 8-10 families in a hundred who have to go without food for more than 15 days in a year. They are hard working people yet to whom the society is not able to provide any work on all days. To begin with (till agro-industries develop to remove this lacuna) some social security will have to be provided for such people. The Gram Sabha or the community through its school & some other leverage must have some work provided for them. Spinning on an improved spinning wheel at a proper place could be one such device. The wages thus paid will equal only to a dole and the less is the number of people who avail of it, the better it is. At least one-third to half of the wage of an agricultural labourer must be made available to him on days when he/she is without any sustenance. This will be like a life-belt thrown to those drowning in the economic sea. Without this relief being planned we cannot rest assured that willing hands denied work, do not suffer hunger hunger. Along with spinning other labour intensive community employments will have to be devised.



### The Third Step

The third aspect is, of course, the introduction of new modes of production. The old village industries are important and must be given all help but they serve a limited number of traditional artisans and cannot, even if revived and improved, absorb the new hands whom agriculture cannot provide work. These are to be given work through industries which need to be fashioned out of a thousand and one inventions, innovations and techniques evolved in laboratories of our land and abroad using the raw materials, skills and energy sources that can be made locally available and yet produce goods so far unknown. The straw, the minerals and the earth can be put to various products. The agriculture produce needs to be processed and the fruits and leaves can also be converted to innumerable useful articles. The gap however is between the known techniques and their conversion into occupations fit for the rural people. The constraints apart from physical are psychological too. The poor man has never worked on his own responsibility. The whole educated unemployed also know no entrepreneurship. To overcome this great failing a mechanism will have to be evolved in which those in the field of business and industry can play their part.

Thus (i) small amenities to inculcate hope among the hopeless (ii) some social security among the weak to avoid hunger and (iii) introducing new avenues of production to make the unemployed take to new self employed occupations, seem to be a right line of strategy for rural change. The total productivity of the village and other necessary improvements should be subservient to the prime task of 'Banishing Foverty'- the objective which rightly should be the slogan of the nation.

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4.3. Hard Boards : Millions of tons of agro-wastes of various types are annually available in the villages. These can be used to prepare particle boards. Several types of boards have been made which are fairly strong and durable, look very attractive and can be used as partition materials. The R R L of the CSIR at Jammu - Srinagar has worked in this line. At R. R. L Jorhat a process of binding the particles without any adhesive by heating the fibre to a temperature where some of its tar is released and pressing it then, makes the boards waterproof.

4.4 Chemical seasoning of bamboo : The forest Research Institute, Dehradun has evolved a simple process for making the round bamboo treated against cracking, splitting, fungal, discolouration or insect-attack by giving it an anti-shrink cum anti-septic treatment. The process offers the possibility for handicrafts manufacturers to utilize bamboos in forms hitherto little used to produce new forms, designs and articles apart from the existing range.

(The above material was collected some time back and needs to be updated.)

The new thinking in the technological world has recognised the need of small technologies and almost all the Western nations' Appropriate Technology, which is less capital intensive and can be applied in a decentralised way to reach the weak, is being evolved and there is a large corpus of information available about such techniques. What is required is the conjunction of the scientific to the business acumen with a social service view.

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# A METHOD OF ORGANIZATION - C O N F R O N T A T I O N

It is mentioned by several radical groups working in India that they base their activities on the teachings of Gandhi (non-violence), Freire (liberation through cultural action) and Alinsky (community organization).

It is comparatively easy to get hold of literature on Gandhi and Freire. But who is Alinsky and what is his method? Below follows a brief introduction.

SAUL ALINSKY worked with the black communities in the United States. He spent his life "organizing powerless communities to seize power from an oppressive structure that was depriving them of their ability to determine their own futures". (ISI)

The method is basically a rather simple one. The organizer is not a leader: he is a catalyst. The people determine that they want to go. The organizer finds out what the people see as their problems; the organizer then, through analysis of the problem, turns the problem into an issue.

(Example: Lack of water is a problem; the fact that a particular officer is withholding funds that have been designated for digging irrigation wells, is an issue. A community can organize around the latter; it cannot organize around the former. When an issue develops, it becomes clear who is the cause of a particular injustice, and this facilitates organization.)

After helping the people to clarify the issue, the organizer provides the community with alternatives of action, but the people decide which of the alternatives they will follow. The people soon discover that it is only by confronting the cause of injustice done to them that they achieve justice. (This confrontation is to be distinguished from violence: in this context, it is interesting to note that Alinsky-organized community has never been involved in violence. When a community is effectively organized and confident of its own power as a community, it realizes that violence is unnecessary.)

In brief, the Alinsky scheme is this:

community problem → political issue → alternatives of action  
→ community confrontation with cause of injustice

If victorious, move on to next problem!

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# ARE FEMINISM AND SOCIALISM RELATED?

Some women in the feminist movement emphatically reject the idea that feminism and socialism are related, and have attacked socialism and Marxism in the name of feminism.

One such attack appeared in an article by Rita Laporte, in the October-November 1971 issue of *The Ladder*, a nationally circulated gay women's magazine. Laporte directed much of her fire against a pamphlet entitled *The Politics of Women's Liberation Today*, by Mary-Alice Waters, editor of *The Militant*. Here Waters answers the charges and questions raised in the *Ladder*.

by MARY-ALICE WATERS

I can imagine a society where the distribution of wealth is hopelessly unjust, but male supremacy is nonexistent; I can imagine a utopia of sorts where all men are treated with justice, but women are hopelessly oppressed. I have tried to see what connection there might be between the oppression of the worker and the oppression of woman. My conclusion is that unconsciously Marxists apply male supremacy no less than all other men. In reasoning that the means of production should be in the hands of the People, they conclude that women, as one means of production - the production of babies - must likewise be in the hands of The People.

The above is one of the more interesting passages to be found in "Political Theology or Practical Government" by Rita Laporte, a long, rambling attack on Marxism, and in particular the Marxist view of the struggle for women's liberation.

It is a curious piece, mixing numerous statements about freedom and justice for all human beings with observations and judgments that could easily be uttered by an ardent reactionary. Such a mixture is not uncommon. Even Lyndon Baines Johnson said "We shall overcome." But it is interesting because the author writes as a proponent of women's liberation, especially lesbian liberation, and she thinks she is attacking Marxism from the left.

However, when Laporte discusses the left, she sounds like Martha Mitchell, barely able to control her revulsion over the dirty, smelly hippies. Youthful radicals, Laporte says, are simply steeped in "old fashioned prejudice" against the wealthy and those who have "made it into a profession." "The selfstyled leaders of the Movement (which in my disgust I call the Bowel Movement) are Caesar types who envision themselves as rulers of the world... From Alexander the Great to Augustus to Napoleon to Hitler to today's puny Movement leaders runs an unchanging thread."

Laporte also accepts the most reactionary stereotypes concerning "human nature", and male and female characteristics. "The stronger are forever trying to take advantage of the weaker", she says, as though it were simply "natural."

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Mary-Alice Waters is the editor of the socialist weekly *The Militant*. She is the editor of *Rosa Luxemburg Speaks* (Pathfinder Press, 1970), and is a National Committee member of the Socialist Workers Party.



n. "Some of us are better able to manage the means of production, the finances, the legal intricacies necessary to run our complex society than ~~are~~ others. Some of us will continue to garner a greater share of the gross national product than others. A society that tries to give equal material reward for unequal contribution will not last long." The implication is clearly that it is those who are more capable who are running things and "garnering a greater share," which they deserve.

And as the statement quoted at the beginning indicates, she even seems to believe that Marxism stands for some kind of state-owned harem where every female would be forced to reproduce as ordered. The fact that Marxists have always been in the forefront of the struggle to free women from the burden of forced motherhood does not yet seem to have penetrated her consciousness.

If such ill-informed and reactionary views were all there were to Rita Laporte's article, it would be of little interest. But along with all this, both implicitly and explicitly, she raises a number of important questions that deserve serious answers by those who take women's liberation seriously.

What kind of revolution?

Laporte's political position is that the emancipation of women can be achieved without abolishing the capitalist system; that there is no fundamental connection between the oppression of women and the exploitation of the masses of humanity by a tiny handful of individuals who own and control most of the resources and the productive capacities of the world. In her opinion the personal, psychological, sexual liberation, "the inner liberation of women IS the revolution". There is no need to change society in order to achieve this on a massive scale.

There is no doubt that a revolutionary transformation takes place within each woman as she becomes conscious of her oppression as a woman and increasingly determined to struggle against her second-class status. That new consciousness has profound ramifications for the lives of each of us. But, Laporte to the contrary, that is not the end. It is just the beginning. It only raises for the first time a whole series of questions we have all had to face as we become conscious feminists.

What are we after?

As women we have been stunned and then outraged as we came to comprehend the degree to which our lives have been deformed, our abilities and ambitions stunted, our self-confidence destroyed, our very characters twisted. We have lashed out against these things. Our first reaction was often that it would be easy to convince other women of all this, because it was so obvious. And if we could only convince enough women of the truth, somehow that would change everything. It was only a question of consciousness.

So we tried. We started discussion groups, which grew. There were 10, then 100, then there were thousands of women involved. But it rapidly became evident that we weren't solving the real problems. The laws that forced motherhood on us were still on the books. We still got only 60% of the pay our male counterparts received. We had no access to better jobs. We were still chained to the kitchen stove and play pen. Most men still looked upon us as bodies for their sexual amusement.

In other words, we were rapidly faced with the key question: How do we go about changing not just the ideas people hold but the



but the institutions set up to perpetuate and reinforce male supremacy?

That question automatically raised others. Where did male supremacy come from? Did it always exist? If not, when did it begin? Who benefits from it? How is it enforced? What social function does it serve?

These are all questions that are never even raised, much less answered by Laporte. Her only reference to these fundamental questions is a passing dismissal of the idea that class society has anything to do with the origins of women's oppression. How the abolition of capitalism could make any difference to women is something she says she cannot fathom.

#### ORIGINS OF WOMEN'S OPPRESSION

If Laporte offered some theory concerning the origins and social function of women's oppression, we could have had a very interesting discussion. But she doesn't. So what are the answers to those basic questions?

Women have not always been second-class citizens, they have not always been considered inferior to men and excluded from any central productive role in society. Prior to the dawn of recorded history, women and men functioned as social equals. Women were the main producers and actually developed or invented the basic skills that placed humanity on the road to civilization - agriculture, tanning, weaving, pottery, architecture and much else.

Women were relegated to an inferior social position only with the rise of class society - society in which the means of production - land, cattle, boats, (and later slaves, and machines) passed from communal ownership and control into the hands of individual men. With the division of society into classes - those who owned versus those who did not, those who could live off the work of others versus those who must work to live - the patriarchal family also came into existence as the basic social unit. Women were relegated to domestic servitude and second-class status in society not because it served the needs of men in general, but because it served the needs of those men who owned property. The sexual restrictions on women were designed to assure the paternity of the heirs of private property and uphold the patriarchal family as the main mechanism for the transmission of property. The family also took over what had previously been a social obligation, responsibility for those who could not produce - the children, aged and sick.

There have been variations in the structure and functions of the family during the millennia it has been in existence. Its role has varied somewhat during the different stages of class society - slavery, feudalism and capitalism - and from one class to another. But the essential function has always remained the same. Like the state apparatus - the armies, police, laws, courts, etc - the family is a repressive institution designed to perpetuate the unequal distribution of wealth and the division of society into basic subgroups that either own the productive resources or do not.

Just as the family is indispensable to class society, so the suppression of women is indispensable to the maintenance of the family system. If women were freed of responsibility for the care of children, and allowed to enter the productive life of society on an equal footing with men, the family as we know it would cease to exist.



Thus, when Laporte states that she can imagine a society with gross inequality but no female oppression, she is simply saying she does not know what social function the oppression of women plays, either historically or today.

It is because the suppression of women is fundamental to class society that the struggle for women's liberation is a revolutionary struggle. When we talk about revolution in our era we are not discussing the situation of a new form of class society for an outmoded one, such as the smashing of feudalism or slavery to make room for the rise of capitalism. We are talking about the destruction of class society in its entirety. We are talking about the abolition of private property and the creation of a system based on production for the use and benefit of all society, not a system designed to produce profits for a few.

Laporte sneeringly asks, "And what would this redistribution of 'ownership' mean to the lowly janitor who sweeps the floor (at General Motors)?" If she were the "lowly janitor," she would probably not be so quick to sneer.

It would mean this janitor, together with other working people, would control the wealth of society and all its institutions. It would mean such "lowly" people could decide to produce the things they need and implement policies in the interests of all. It would mean free 24-hour child care of the best quality all the resources of society could provide; it would mean quality low-cost or free housing for herself and everyone else; it would mean an end to household drudgery on top of working a full-time job, because laundry, cooking, and cleaning would all be socially organized; it would mean free education to whatever level she desired, regardless of her age, or background; it would mean free medical care covering everything; it would mean an opportunity to work at any job she wanted; and much more. In short, it would be quite clearly in the interests of the "lowly janitor."

#### CLASS AND SEXUAL OPPRESSION

Let's go on to Laporte's next question. "I have tried," she says, "to see what connection there might be between the oppression of the worker and the oppression of woman".

First of all, many women are workers, a fact which Laporte doesn't seem to consider very seriously. They have jobs outside their homes, usually in addition to their full-time housekeeping tasks. The typical worker is not the \$20,000-a-year, middle-aged, white, male plumber Laporte envisions.

Secondly, how are those who must work for a living exploited, whether male or female? In the most immediate economic sense, they are not paid for the full value of what they produce, the rest being appropriated by those who own the factories, machines, land etc. But the exploitation of the working class is much more than that. The entire economic system is organized to exploit and oppress.

It is a system based on production for the purpose of increasing the individual wealth of a few; a system based not on planned rational production to meet the needs of humanity but on anarchic competition to capture markets and maximize profits; a system which must produce wars as the ultimate arbiter between the capitalist giants; a system which must produce racism, sexism, and extreme prejudices of every kind in order to prevent those who produce all the wealth from uniting to demand control of what



they produce; a system that cannot provide adequate schools, health care, housing or other basic necessities because such services do not bring in enough profit.

The individual worker has absolutely no function in society except to sell her or his labour power at whatever rate is attainable. When you lose your ability to produce - through age, illness or injury - you are socially extraneous. That is why society is literally not concerned with whether you live or die.

Laporte contends all that may have been true under the "pure capitalism" of the eighteenth century, but is no longer so. Fear of revolution has forced the rulers to grant certain concessions to social welfare, like medicare and social security programs. But does Laporte really believe that the welfare system - just to take one example - is really designed to benefit those forced onto its rolls because society has no productive contribution for them to make?

On the contrary, it is designed to barely keep them alive, and as the current controversy over welfare shows, the rulers are constantly trying to cut back on even that level of social responsibility. It would be hard for Laporte to make a case that welfare, social security and unemployment insurance - which are all paid for out of the workers' pockets anyway - are plans designed to end rather than perpetuate exploitation.

#### HOW ARE WOMEN OPPRESSED

Again it is a question of the entire organization of society. Women are relegated to the role of domestic slave - child rearer, cook, housekeeper - because it is the least costly means for those who control this society to assure that society as a whole has no responsibility for the care of those nonproductive members of society - the children, the elderly, the incapacitated. Everything else follows - the exclusion of women from a central productive role; the economic dependence of women on men or a man; the educational job discrimination; the psychological conditioning to accept all this, supposedly willingly.

Working women in capitalist society are doubly exploited and oppressed, both as workers and as women. And women of the oppressed national minorities are triply exploited. But Marxists do not deny that all women are oppressed to one degree or another simply as women, regardless of class. That is why the struggle of women for their liberation can involve women of all classes.

But that struggle must be directed against the capitalist system itself - against class society - if women are to achieve their liberation. For that reason, our struggle is against the same enemy that the working class and the oppressed national minorities face. If Laporte wants to dispute that, she will have to prove that capitalism is capable of granting all our demands, that our struggle is not in fundamental contradiction to class society.

But even on the most elementary level it is obvious. Who are we fighting in our struggle to abolish all laws that restrict our right to abortion? Why do we have to fight for the right to control our own bodies? Even to gain this most meager reform we are forced to take on the national government, the reactionary religious institutions, the courts. What about our other demands - equal pay, 24-hour child-care facilities for all? Will such demands be granted by those who are trying to roll back even 6% pay increases? The answer is evident.



## "Male" and "Female"

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Throughout her article Laporte makes comments that equate "male" with violence, conquest, destruction, and glory-seeking, while "female" is synonymous with peace, privacy and homemaking. Nowhere does she even hint that such character traits, to the extent they have any validity at all, are social, not biological, in origin.

But all the characteristics she accepts as being "male" attributes are in reality characteristics not of men per se but of class society, of a competitive system based on each one for herself or himself, a system where the stronger do take advantage of the weaker. To place women in power instead of men, without fundamentally changing that system, would alter nothing.

Laporte proposes that women should take over the government from men because they know more about "homemaking", and "what is the proper province of government except homemaking on a vast scale?" she asks. Unfortunately, Sirimavo Bandaranaike and Golda Meir are no more peace-loving homemakers than Richard Nixon or Nguyen Van Thieu. That is not because they are "deformed" women who have made it in a man's world. They are simply women who are committed to the defense of the capitalist world.

What, asks Laporte, would cause the oppression of women to disappear if the capitalist system were destroyed? Wouldn't women still be on the bottom, even if all other inequities were wiped out?

First of all, it would not simply disappear on the morrow of the revolution. The myth of female inferiority is far too deeply ingrained for that. But a revolutionary socialist society would immediately eliminate the material basis of women's oppression, because it would have no economic function. There would be no reason to relegate women to domestic slavery. "Marriage" and "divorce" would become totally personal decisions, subject to no laws, contracts or restrictions. Abortion and contraception would be available on demand. Free 24-hour quality child care and free education would be made available for all. Women would receive equal pay for equal work and a system of preferential hiring and training would be instituted to compensate for the previous discrimination. Free or low-cost laundry, food and cleaning services would be established.

In the United States, with its tremendous wealth, such measures could be taken very rapidly and together they would totally eliminate the economic chains that bind most personal relationships in class society. Then and only then would truly human relations begin to develop.

Where are we now?

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Laporte raises other questions similar to those already discussed. But they all come back to the key dispute. Is it necessary to abolish the capitalist system in order to liberate women? The answer must be an unequivocal yes. Being a socialist and a feminist is not a contradiction. In fact, becoming a revolutionary Marxist is the only totally consistent position for a feminist. That is why hundreds of women radicalized by the



women's liberation struggle have also joined the Young Socialist Alliance and Socialist Workers Party in order to work with women and men toward the common goal of a socialist revolution.

But that does not mean, as Laporte charges, that the struggle for women's liberation is postponed to some indeterminate socialist future "after the revolution". It means we fight here and now to win every reform, every concession we can. It does not mean that there is no need for a mass women's movement fighting for the basic needs of women. We need both a mass women's movement and a revolutionary party.

Our goal must be to build a mass feminist movement. Not just hundreds of thousands of women who are highly conscious, but a movement of millions of women fighting to win concrete demands like abortion law repeal, child care and equal pay. It is in the course of this struggle that the vast majority of women will become convinced that a basic transformation of society is necessary.

That is the revolutionary and feminist perspective for women's liberation.



INTERNATIONAL CONFERENCE OF CHRISTIANS FOR SOCIALISM

Quebec, April 13, 1975

I. INTRODUCTION

1. As representatives of Christian groups we have come together from various countries of Latin America, North America, Europe, Asia and Africa, for an international conference. In the three years since the First Latin American Conference of "Christians for Socialism" in Santiago, Chile, in April 1972, Christians committed to the *who's liberation* struggle for liberation have grown in number and extended throughout the world. As part of this current, we attempt here to define and develop our action and thought as a point of reference in the international class struggle today.
2. During this conference we have undertaken a political analysis of the present crisis of transnational capitalism, as well as of the struggles of peoples for liberation and the construction of socialism. Starting from the perspective of our political action, we have re-defined community life, reflection, communication and celebration of our faith in Christ. Likewise, we have reflected on the situation of our churches, nationally and internationally, and also on the rise of a popular and proletarian Christianity, capable of emancipating itself from the domination of bourgeois ideology. We look with hope toward the emergence of a liberating evangelization and toward the establishment of a church of the people. Lastly, we analyze within this new Christian current the prospects of "Christian for Socialism". We present in this final document part of the intense work of the commissions and plenary sessions.

II POLITICAL SITUATION AND LIBERATION STRUGGLES

3. Today the world is undergoing suffering from an economic crisis, but the oppressed classes always live in crisis. Hunger is a permanent and cruel reality for millions of men, women and children of Asia, Africa and Latin America where now, rural unemployment is invading the cities. In the face of this crisis the conspicuous consumption of the wealthy classes is a scandal. In the capitalist countries of the southern hemisphere, the political system assumes an openly repressive, even fascist, character, as in Chile and South Africa. Many suffer persecution, jail and even death, as police methods and torture techniques become ever more refined.
4. The present economic recession, with its concomitant unemployment and inflation, strikes all workers in the industrialized nations, hitting migrant workers and racial minorities especially hard, and threatening the economic system in its totality. The spectre of crisis looms again, this time in a consumed society which claims to have overcome its contradictions.
5. The profound cause of the crisis is the unequal and contradictory character which expansionist world capitalism has assumed. Its tendency is characterized by a concentration of capital and technology in the hands of transnational corporations. The majority of these corporations operate from headquarters located in the United States, and are supported by that country's government, invading practically the entire world through their affiliates. The power of these corporations is greater than the power of many nations whose governments are forced to submit to them, and their economic growth rate surpasses that of the more advanced national economies. Their accumulation of capital based on profits obtained from abroad continually grows because they are able to exploit cheap labor and manipulate prices and credit. They also plunder natural resources,



thus exhausting them. This type of industrial development fosters the breakdown of ecological equilibrium, increases environmental contamination and, in general, generates misery in dependent countries. This type of socio-economic system has proven itself incapable of resolving the problems presented by rapid demographic growth, inadequate food supply, and consequent hunger.

6. All over the world, people are reacting in defense of their standard of living, by challenging this concentration of capital and technology. Capital, faced with the political and social conflicts which it generates, migrates to areas which permit high profits and provide the conditions of security and order which make profits possible. When representative democracy cannot sufficiently guarantee this security, even by assuming authoritarian characteristics, capital turns to totalitarian regimes which obstruct and brutally suppress all political and trade-union activity. Thus, the police apparatus expands, with extensive and scientific use of torture, leading to contemporary fascism. The resulting system is a final consequence of the international division of labor, proper to the imperialist phase of world capitalism. Imperialism does not hesitate to unleash internal subversion, to intervene politically and even to provoke limited wars, such as that in Viet-Nam, which was fought to preserve a threatened hegemony.
7. At the ideological level, a new cultural power has developed through the exercise of control over the media, educational institutions, etc. The consumer society, development seen solely in terms of GNP growth, law and order, and anti-communism, are all components of the ideology promoted by transnational capitalism.
8. Even the people of the United States, at the heart of the empire, are affected by profound contradictions. The productive base of the country is undermined by the flight of industries to other countries in search of higher profits. An enormous balance of payments deficit caused by the high military costs of imperial dominion produces an economic crisis, manifested in rising inflation and the fall of the dollar as the currency of international reference. In this way the U.S.-based transnational corporations end up contributing to the economic decay of their own country with serious consequences for its workers.
9. The transnational corporations, most of them based in the United States, generate contradictions which set them against the dependent national states of Asia, Africa and Latin America. The corporations also conflict with the competing capitalist states of Europe and Japan and even the United States. The contradictions provoke an increasing and world-wide anti-Americanism. The crisis affecting the United States of America and other capitalist countries, far from being generated by the oil-producing countries, is a structural crisis. Thus, the present inflation, unemployment and slow economic growth will not be overcome in the next few years.
10. The international class struggle thus encounters new contradictions and assumes new forms. An economic minority which is beginning to organize as a class on an international level, through control of transnationals and alliances with the bourgeoisie of each country, is developing a political project of world proportions and faces a crisis which it cannot totally control. This minority, is the number one enemy which the proletariat and peasants must combat. It is evident that they are not yet sufficiently organized on a world scale. They are advancing energetically, however, in many of their national struggles, creating the necessary conditions for regional and international coordination.

*The Capitalist  
Camel trying  
poke its nose  
into the tents  
of the developing  
countries*



11. This explains the numerous and powerful liberation movements which are found in various countries. Despite the fascist escalation in South America, these movements have won impressive struggles: in the first place, Viet-Nam and Cambodia, and also in Guinea-Bissau, Mozambique, Angola and Palestine. In certain countries the military on becoming conscious of the repressive role they are forced to play, have broken with this role and assumed anti-imperialist positions. Racial and ethnic conflicts, the struggle for human rights and women's liberation are increasingly linked up, often with a progressive thrust, within the complexity of today's class struggles.
12. But there are even more. Within positive signs the contradictions of the capitalist countries analyzed above type of social organization is possible and is already being put into practice. Socialism is historic movement which brings together those who have made a class option in favor of the interest of workers and of the world's most oppressed peoples. The advanced praxis of the popular movement expresses this class option and actually gives birth to the new societies of the future. Amid the harshest realities of struggle, it is this praxis which gives foundation to our firm hope for a human and just socialist society. This process, as demanding as it is full of promise, is increasingly commanding the participation of men and women who are conscious of human solidarity.
13. Thanks to the victories won by the working class and the people through-out this century in Europe, Asia, Latin America and Africa, various countries of the world have established and proceeded to develop socialist regimes. Socialist construction in these societies takes place under difficult conditions, each of them encountering its particular obstacles, internal and external - above all, the opposition of the capitalist world. So profound a social and cultural transformation is impossible without some suffering and partial failures. In countries now dependent on capitalism, this transformation will not be accomplished without the brutal hostility of imperialism, which employs anti-communist propaganda economic blockades, political subversion, arms buildups and even war to prevent their development. Under these conditions, the socialist countries face an objective responsibility, to share experiences and offer solidarity as they are required by the world-wide revolutionary movement. Their capacity to overcome their errors, limitations, and above all, the differences between them, will contribute to the unity of the international workers movement and to the defeat of the common enemy.
14. In the struggle for liberation and socialism, the workers movement and the exploited countries themselves are encountering in very concrete and urgent tasks. We want to mention three in particular. First is the international coordination of trade union struggles, people's organizations and movements of workers and peasants. Also important, to the extent that they reflect the interests of the popular classes, are the efforts of various countries in defense of their natural resources and the international price of these resources. Lastly, there is the urgent task of solidarity against fascist governments. Work of this type can mobilize progressive and liberal sectors in defense of human rights, thus strengthening the struggle of the workers against international capital.



### III A NEW PRACTICE OF THE FAITH

15. In the context of transnational capitalism today, many of us have discovered that our living, reflection, communication and celebration of faith in Christ find their true place in commitment to a liberating and revolutionary praxis within history. This discovery has led us to see more clearly that the revolutionary task is the place where faith attains its full growth and its radically subversive force. In taking up the task, we embrace all the demands of Jesus's practice, and recognize in him the foundation of a new humanity.
16. The recent history of popular struggles, with their successes and setbacks, makes clear to us that the exploited classes and countries are themselves the first and true agents of their own liberation. On top of long-standing oppression, repressions of a massive and systematic type is being carried out against every effort of the popular classes to transform the capitalist social order. The only effective and radical challenge to this combination of oppression and repression lies in the struggle which comes out of the strength and consciousness of the poor of this world. Living and reflection on the faith in this context of oppression and repression, forces us to seek untested possibilities in our testimony to the power of Jesus' resurrection. If the kingdom is in any sense present when the poor are evangelized, we are convinced that this occurs solely in the measure that the poor are themselves the bearers of the good news of liberation for all people; that is to say, insofar as they make the Gospel their own and announce it in word and deed, rejecting the society which exploits and oppresses them. It is thus that the "wretched of the earth" bear out their unrelenting hope in liberation.
17. The praxis of the exploited is a subversive praxis which seeks to build a new earth; to adopt this praxis is to live the experience of an evangelical conversion and to find a new human and Christian identity. Conversion means to break with collective and personal complications and to challenge oppressive power. Moreover, and above all, if we say we are Christian it means to open ourselves to the burning question of the needs of the popular struggle. This political and spiritual rupture is the presence of the resurrection, the passover of freedom and the experience of the new life according to the Spirit.
18. Hitherto the faith has been lived and understood in isolation from the contemporary revolutionary struggle and in a world to which a conflictual and dialectical vision of history is alien. Insofar as identification with the struggles and interest of the popular classes constitutes for the Christian the axis of a new way of being human and accepting the gift of God's word, to that degree the Christian becomes aware that a faith-reflection rooted in historical praxis is really a theology linked to the liberation struggles of the oppressed.
19. The truth of the Gospel lies in doing it. Being a witness to the truth means making real the promise that men and women shall be brothers and sisters faith the faithful parenthood of God, is transforming history from below, from among the poor of this world.

### IV NEW FORMS OF CHURCH LIFE

20. Christians who seek to live this experience of faith find themselves up against the hard reality of a church which contradicts simultaneously the demands of their political commitment and those of other faith. Seeing peoples, countries and continents brutally crushed,



they expect a prophetic voice of denunciation from the churches which are the heirs of the rebel of Nazareth. But this voice is not heard. It is true that many Christians and some authorities of different churches are discovering that Christianity must be released from subservience to capitalism. The great majority of the churches, however, keep silent. Moreover, ecclesiastical leaders often maintain alliances and diplomatic relations with those who wield economic and political power. The mission of peace and reconciliation which the churches want to develop in a non-conflictual context enforces a stance of neutrality which favors those in power.

21. The dominant ideology makes it difficult for the great majorities of Christian people to live a faith and a religious practice which un-masks and overcomes the anti-Christian logic of capitalism. Rather they are led into legitimating the system by investing their energy and generosity into purely spiritual concerns. Most Christians in the rich countries have no conscience regarding the exploitation of their brothers and sisters in the underdeveloped countries and continents. Objectively speaking, they even cooperate in this exploitation and fail to perceive in this rupture of the world a rupture of Christian unity.

22. This attitude seeks to base its theological justification on the churches' image of their evangelical mission, which is conceived as apolitical and restricted to the spiritual sphere, far removed from class conflict. Such a conception permits Christians to be judges without being participants. It is coherent with a view of history in which the fundamental conflict is reduced to an opposition in the human heart between good and evil between grace and sin. In this frame of reference the structural conflict existing between classes and between countries is ignored.

Constant recourse to the "transcendence" of the spiritual sphere, of faith and of the church, calling into question not the oppressive system but the liberation effort itself, is further evidence that this principle, the theology rooted in it, and above all the praxis it seeks to justify, objectively favor the interests of the ruling classes.

23. Nevertheless, this dominant orientation does not fully express the complex and often contradictory reality of the churches and their behavior. The weight of structures and of the dominant theologies has not succeeded in stopping the liberating dynamic of the Gospel. In many parts of the world, Christian people - laity, priests, pastors, nuns, brothers and bishops - give their lives with generosity of spirit in the service of the poor, sharing their life, and their struggle and valiantly defending the rights that have been violated.

24. But these factors do not eliminate the profound contradiction, in the life of the revolutionary Christians, between fidelity to the Church and fidelity to the popular classes. They refuse to leave church, for this would mean abandoning the Gospel to the ruling classes. This contradiction and suffering engenders the search for an ecclesial alternative.

25. The people of God are beginning to reappropriate the scripture, re-reading it from the point of view of the poor and oppressed classes. Also, they are beginning to assume once again the responsibility of themselves directing their churchly activity. And, finally, they are beginning to reappropriate liturgical and sacramental symbols and to find new possibilities for contemplation, celebration and eucharist,



1972 → Chile (Santiago)

1975 → Quebec, CANADA.

### General Declaration

1. Analysis of Society (capitalism)
2. ways of living, reflecting, prayer
3. Analysis of institutionalized Church.
4. Revolutionary Trends within Christianity
5. Movement "Christians for Socialism"

- - 6 -

which can provide a common sign of their two-fold fidelity, to Christ and to the liberating struggle of the poor.

A truly new form of the church can be developed only in a society which has broken down the structures of domination and laid foundations of the objective conditions for liberty and justice. We know that no type of historical society of church can ever be totally free of sin, and therefore, the forward pull toward human and Christian fullness of life will never cease.

26. Nevertheless, the topan perspective has already attained a mobilizing impetus in today's struggle, promoting new kinds of local Christian participation still groping and provisional but not for that less vital. It is in this growth of a people's church that the Christian conscience takes on class consciousness without being reduced to it.

Through this forward groping the Christian community slowly begins to envision the features of the future society. To the degree that the people become the subject of history, the people of God will be the true subject of the church.

27. The church will be an effective sign of God's love and of Christ the Liberator only if it becomes in itself an effective and prophetic sign of a different kind of future, not only beyond but in the very heart of history.

### V CONCLUSION

28. A growing number of Christians in five continents are joining in the struggles for the liberation of the people. These Christians are shaping a broad current, defined by a new quest of faith and a search for churchly forms within a proletarian and socialist political practice. In the different countries, these Christians are forming a variety of grass-roots groups and national movements. They are not, nor do they wish to be, "Christian" political parties. On the contrary, viewing the workers movement as necessarily one, these Christians are joining proletarian parties and organizations. Inserted in and somewhat dispersed throughout the political struggle, they nonetheless unite to carry on in the Christian domain an ideological struggle which is becoming more and more important. This activity brings new motives for meeting in committed Christian communities where a liberating evangelization and the seeds of a people's church are germinating.

In this way, a new kind of Christianity, tied to the interests of the working class, is arising as an alternative to a Christianity allied ideologically and structurally to the dominant system of exploitation. As part of this wider current, the "Christians for Socialism" movement is nourished by it, and in some countries and certain situations it constitutes an organizational tool as useful for its grassroots membership as in its public and social manifestations, at the national and the international levels.

29. The development of this current of Christians committed to the struggle for liberation, and the growing strength of "Christians for Socialism" are signs of hope.

This hope is rooted in the historic force of the movement of workers and peasants, and in its capacity for resistance and struggle. This movement is growing in unity and winning over broader and broader sectors of the people, thus achieving victories in various parts of the world. The historic force of the struggle of the poor and oppressed, in whom we acknowledge the presence of Christ, serves also as the starting point for the liberation of the Gospel, of theology, of the churches and of society - all of which have been laid captive by those in power and their ideologies of domination. As brothers and sisters, we call on all Christians to share actively in our concerns, in our efforts, and in the struggle we are waging.



## GROWTH AND EQUALITY IN INDIA

Joost Kuitenbrouwer

India:

Prior to this process of subordination India had already a high degree of development in pre-industrial terms. Agriculture was sufficiently developed to support a relatively large number of non-agricultural workers; there were highly skilled craftsmen in iron, steel, textiles. Shipbuilding and metal work and manufactured goods were not only produced for home consumption but as indicated also for export. Its economic wealth had for centuries been controlled by merchant bankers and princes who siphoned off the surplus of production over consumption in the forms of idle hoards of gold and silver bullion; hence this wealth was sufficiently concentrated to represent a potential source of investment funds. India's resources of good quality coal and iron were located in convenient proximity to each other. Why did not this combination of apparently propitious circumstances produce a type of economic development, capable of generating sustained momentum? Basically, the answer is simple. It was the colonial relationship which subordinated India to British political and economic interest.<sup>1</sup>

The systematic and intense plunder of India, starting from Bengal, was unquestionable. It was instrumental in giving a major impetus to the start of Industrial Revolution in England. The magnitude of this primary accumulation was tremendous as can be seen from the fact that it was estimated to be larger than the capital of all the industrial enterprises operated by steam in Europe in the 18th century.<sup>2</sup>

The monopoly; the East India Company acquired with regard to foreign trade, came to involve the monopolisation of internal trade. Thus resulted in the Indian merchants being subjected to heavy taxation and the peasantry and local traders being forced into politically handing over their products and goods.<sup>3</sup>

As suggested above, a definite blow to Indian society came with the imposition of free trade through which it lost its competitive capacity. From 1815 to 1832 India's cotton exports dropped by 92 per cent. All other industrial products shared this fate.

The process of subordination had not only profound effects on India's social structure in terms of the emergence of new classes but also in terms of the emergence of a new type of relationship between the towns, which grew into cities, and the surrounding rural areas. This can be illustrated with the nature of the expansion of Calcutta which became the centre for the collection of the Land Tax as well as the collection of manufactured goods from the same peasantry. The land Tax was so severe that it approximated even the whole of the economic rent, thereby paralysing agriculture, preventing any own accumulation, and creating poverty and indebtedness.<sup>4</sup> It was this Land Tax which was used to acquire the manufactured goods from the peasants-artisans at low prices for export.

It was through this forced appropriation of surplus that the prevailing balance between agriculture and industry and the potential for a balanced and integration process of agricultural and industrial development was seriously affected. The disintegration of the productive structure and the imposition of new forms of coercive control, designed to regulate and facilitate extraction, became the principal cause of impoverishment. In this process, the State functioning as the instrument of extraction, promoted and defended the interest of the East India Company. It is here that a fusion can be observed of the process of public and private monopolization of surplus appropriation.

The process of disintegration of the nascent industry was deepened by Britain imposing on India a new division of labour by which India had to produce raw materials and food which were again acquired at low prices.

The imbalance introduced in the productive structure through the institutionalization of unequal trade forcedly imposed through conquest and subordination had disastrous consequences. Not only the village community, which has so far been the basis of the Indian community, disintegrated but the balance between agriculture and industry was upset. Also cities were checked in their development and people in the city and in the countryside



were force back into agriculture. Thus Dacca, one of the flourishing centres in Bengal, 'was partly overgrown with jungle and the craftsment, reduced to idleness, spilt over into agriculture'.<sup>5</sup> The imposed export and import trade and the collection of land tax brought about other deep-going changes in the social structure. They led to the emergence of a growing absentee landlord class and trading class, both operating from the centres and draining the countryside. Thus, the expansion of the centers, of which Calcutta has been the most illustrious example, took place at the expense of the impoverishment countryside which provided the base for the accumulation of wealth for the centers. The emergence of a ruling class or the reinforcement of the existing one was a direct consequence of British rule. Gradually the new class institutionalized its control over resources and over the appropriation of surplus through both the legalization of various forms of land tenure and of the imposition of direct and indirect obligations on the dependent rural population.

In the second half of the 19th century industrialization starts again in response to Britain's need for improved communications in India and also to counteract the growing competition by other West European countries and Japan on the industrial market. Thus, by relying on the cheap labour in India, Britain was able to challenge her competitors and make high profits at the same time. This illustrates the need and trend of capital at the same time, a trend which has continued until recently, to industrialize the dependent countries in view of the advantages to be derived from the low organic composition of capital, cheapness of labour, the poor working conditions, and the low level of labour legislation and labour protection. India's cotton industry was initiated by the new commercial, trading, and landed elite, promoted by the Britain colonial administration as a necessary intermediary. Its capacity for accumulation was enhanced by the impoverishment of the rural population which as a result of increased indebtedness had to rely increasingly on money-lending with its usurious practices. Until today indebtedness and dependency on a money-lender are basic characteristics of the conditions in India's rural areas.

The forced ban on production outside agriculture had multiple negative consequences. It created increasing pressure on the land. It contributed also to the rise of rent and land speculation, the underutilization of labour and the emergence of overpopulation (in relation to the potential resources and opportunities for productive work). It, therefore, added to the dependency of the impoverished peasant population on landlords, merchants and money lenders. The process and pattern of monopolized appropriation of surplus by Great Britain started to reproduce itself in the relationships between the newly formed classes and the major victims of extraction - the peasantry - as well as in the relationship between the expanding larger centers and the hinterland.

Can it be assumed that if India had not been subjected to foreign domination, it would have been able to develop in its own way? This is a speculation to be sure, but a legitimate one. For the alternative to the massive removal of India's accumulated wealth and current output, to the ruthless suppression and distortion of all indigenous growth and the systematic corruption of its social, political and cultural life that were inflicted by Western capitalism on India as other societies which became dependent is by no means hypothetical. This can be clearly seen in the history of Japan, the only Asian country that succeeded in escaping its neighbours' fate. In Japan the conditions were as conducive, or rather as unfavourable, to economic development as anywhere else in Asia. Perhaps just because of its condition which was more favourable, Japan could have its own way.<sup>6</sup>

At the end of the period of British rule in India there was a huge rural proletariat, about half of the rural population, a small class of prosperous peasants, and a tiny elite. This rural proletariat consisted mainly of agricultural labourers, either landless or with a tiny plot to tie them to the landlord.<sup>7</sup> Monopolistic control over industry was shared by a tiny native bourgeoisie and foreign capital.<sup>8</sup> The prevalence of a limited market as a consequence of the semi-feudal structure in the rural areas led to the pre-dominance of non-productive over productive capital formation, expressing itself in the overriding power of a financial and commercial establishment in which the interests of the urban bourgeoisie (estimated at half per cent of the total population) and the rural bourgeoisie (estimated at 1 per cent of the total population) became united while the urban petit bourgeoisie became largely engaged in trade,



transport, commerce and money lending.<sup>9</sup>

In spite of all its seemingly impressive plans, policies and programmes for development over the last nearly twenty-five years, India has remained a society with widespread poverty and hunger and although it has gained political independence, it is economically dependent as never before. External Debt services have risen constantly and have strongly accelerated in the second part of the sixties, reaching an amount of 3 billion dollars, representing 28 per cent of foreign exchange earnings and 36 per cent of aid requirements. It is estimated that its external debt will increase to the astronomical amount of 14 billion dollars in the beginning of the eighties while it will still need 18 billion in foreign aid. Over half of the total aid to India is from the U.S.A. and about one third of the total has been in the form of food aid.<sup>10</sup>

Foreign aid has accounted for 20% of the total investment in India's first five year plan while it has been rising from only 10% in the first five year plan to 30% for the third plan and the fourth plan had to be suspended for four years because of aid uncertainties and a recession in the economy.<sup>11</sup>

The income structure in India continues to reveal extremely serious disparities. A study on the income structure in the beginning of the sixties revealed that only 2.3 per cent of the urban and less than 1 per cent rural population had incomes ranging from comfortable to affluent while in contrast 85.6 per cent of the urban population and 86.9 per cent of the rural population lived in a situation 'which is hardly to be defined even euphemistically, as one of bare subsistence.'<sup>12</sup>

Another study suggests that 40 per cent of the rural and 50 per cent of the urban population lived below the poverty line, both in terms of calories and quality of nutrition. There is enough evidence that the increase in consumer expenditure, which has since then taken place (only 1/2 per cent per annum) has hardly benefitted the poor. Disparities have increased, and can be expected to deepen if the present trend continues, in spite of the Indian Planning commission which continues to stress a high rate of growth as the principal development objective, thereby consistently supporting the policy orientation of the country as it evolved from independence onwards.

While the rural poor consist mainly of agricultural workers, small cultivators and artisans who have been thrown out of work, the urban poor are largely composed of rural migrants, driven away from their villages by their untenable situation, to find even a more difficult one in the cities. The situation of the poorest 20% among these has even deteriorated in the past years.<sup>13</sup>

Agriculture is still the predominant sector of the Indian economy, producing nearly half of the national income. It still employs more than 3/4 of the labour force. Organised industry which only produces 6 - 8 per cent of the national income and employs only 2 - 4 per cent of the total labour force. The rest is active in the tertiary sector. The fact that the share of the secondary sector in the total net domestic product has slightly been falling while that of the tertiary sector has increased substantially between Independence and the seventies, is clear indication of the lack of dynamism in the industrialisation process: and the increasing and dominant role of merchant capital which, instead of utilizing the accumulated surplus for productive purposes, channels it towards unproductive or speculative use, particularly by the expansion of its own operations.

The limited and questionable nature and the direction of the industrial development process in India are clearly indicated by the following facts: 1. the real wage rate in the total factory output over the last thirty years remained virtually stagnant; 2. the share of wages in the value of total factory output been declining; 3. the industrial goods are mainly being produced for the richest 10 per cent of the population, that is to say the richest ten per cent of the rural population and the richest 10 per cent urban population.<sup>14</sup> Thus, the direct producers have not improved their condition in spite of increased production while expanded consumption has become largely available to a very limited group: to those who have direct control over the means of production or resources; and to those who directly or indirectly depend on them and are associated with them.



The effect of capital intensive technology introduced by Indian big industry and foreign interests are multiple: it displaces productive employment in the rural areas and further upsets the balance in the local economy; it draws away from or precludes investment in labour intensive industry and in the urban areas; it tends also limit urban employment opportunities. Indian big industry and foreign interests are both monopolistically organized and are increasingly intertwined in interest. Although the total foreign capital is small, it is strategically invested in banking, industry, mining and agricultural activity. The lopsidedness of the Indian industrial structure is reflected in the comparatively high percentage of workers in big industries. In 1956 24.6 per cent of the workers were working in establishments employing 20 - 99 workers; 32.1 per cent in establishments employing 100 - 1000 workers; and 43.3% were employed in industries having 1000 or more workers.<sup>15</sup>

The possibility of producing an increasingly diversified amount of goods for the privileged income groups is directly related to the capacity of these income groups to increase their income and to the relative independence of industry to set its prices. This can only do in as far as it extends its capacity for monopolistic control. The use of capital intensive technology which is induced both by considerations of growth as well as imposed by foreign investments,<sup>16</sup> may also be inspired by the consideration that the problem of food supply, with a more limited demand, may be more easily solved.<sup>17</sup> Monopolistic control over food supply may at any rate secure the necessary profit.

The irrational and wasteful nature of monopolistic big industry and the profits it makes are most clearly illustrated by the extreme underutilization of productive capacities. There is an estimate that productive capacities are generally used at 54% of the potential in the big industries producing consumer goods and 22% in those making the means of production.<sup>18</sup>

Thus the highest rationality from the point of view of profit creates the absence of any reasonable response to the basic and urgent needs of the majority population. There are disregarded in view of the superior rates of profit which can be made in the production of non-essential goods.

In short, the rural and urban bourgeoisie in control of the means of production together with the petit bourgeoisie exercise a threefold squeeze on the majority population by the control of land, industry and the instruments for surplus extraction.

The desperate situation in India reveals a profound contradiction between theory and practice. From the very beginning, development policy has officially been aiming at the realisation of equality and the promotion of equal opportunities for all. At the same time in its practical orientation, these policies served the primary purpose of economic growth resulting in the increase of inequality and poverty. While Indian planning was and is socialist in terms and while it was time and time again emphasised that only a socialist policy could give a reasonable answer to India's problems of dependency and poverty, Indian planning in reality has served as the matrix for a modernization process in the service of vested interest groups which have systematically utilized the State and the resources of the State for their own ends and for the benefit of a minority.

Although scholars and planners in India have recognised and have insights into the increasing contradictions revealing themselves in the dynamics of the social structure and have also made suitable recommendations, they have not, in any way, been able to alter the course of the process.

In the agricultural sector or in the rural areas, most of the benefits of the Government's policy since Independence have gone to the rich farmers who always have been considered the lynchpin of agricultural development.<sup>20</sup> Thus, the traditional forms of appropriation of agricultural surplus were not only continued but even intensified. This becomes clear practically in areas where irrigation has been introduced. Production and productivity have increased but at the same time the proportion of tenants and the rental rates have increased also. At the same time the prevailing policy has failed to organise an adequate credit and marketing structure which would provide incentives for the peasant population at large to increase production and productivity so that they could contribute



to an adequate food supply to the centers. This inability to produce more has in turn been due to the exploitative nature of social relationships in the agrarian structure. It is the persistence of this social structure which has caused the wide underutilization of the productive potential in and of people as well as of available resources.

The policy of 'betting on the strong'<sup>21</sup> should not be considered as an open option or alternative which the Government could choose. It could more appropriately be considered an inevitable consequence of the overriding power of the rural bourgeoisie and its capacity to influence and control the functioning of the State. Diffusion theories<sup>22</sup> giving a theoretical justification for such a policy can better be considered as an ideological justification than as a scientific argument. It has become clear that the strategy of focusing on agricultural growth through the rich farmers has reinforced the economic and political power of the minority group already in control of resources and the instruments for the mobilization of these resources. Poverty and hunger for a majority of the population, on the other hand, has not been diminished and inequality has increased.

The introduction of the New Agricultural Strategy, which grew out of the intensification of the so-called intensive agricultural district programme started in the early sixties after the failure of the Community Development programme, may help to alleviate the pressure on the balance of payments and may have substantive results in terms of increasing food supply. But it also increases India's dependence on outside inputs and it contributes at the same time to the intensification of regional disparities (in terms of favoured over non-favoured areas) as well as income disparities, thereby making more acute the already existing contradictions and resulting conflicts between landlords and tenants, owners and landless labourers.<sup>23</sup> At the same time, it will promote further speculation, eviction and underutilization of labour as a result of the spread of capital intensive technology.<sup>24</sup>

The 'effective demand' for the increased supply of food can hardly come from the low income groups. So it may be expected that with increased supply, demand must soon reach its 'ceiling' in view of the inelasticity of demand for food from the higher income groups which tend to diversify their expenditure patterns. This might lead to a further process of rationalisation in agriculture which in turn will lead to further marginalisation of small producers who would, in as far as they have as yet not been routed out of the market, not be able to stand up.<sup>25</sup> Such a process will further limit purchasing power among the rural population so that consumer goods will naturally be more directed to those who are in a position to acquire them. This will in turn enhance the process of diversification of consumer goods instead of production for the basic needs of the population at large.

The suggestion made three years ago, by the President of the world Bank, while recognizing the problems that the Green Revolution would endanger -- the effects of the Green Revolution were acknowledged as 'a problem for a second generation to solve' -- represented the view that the agricultural growth strategy followed was for the present the most desirable policy since it would solve the food problem. Such a view on agricultural modernization leaves aside the causes of large scale starvation, of the large underutilization of people's productive potential, and of the lack of effective demand by major part of the population. It also leads to justify agricultural growth, not in view of the most crying needs of majority population, but in function of securing support for India's industrial growth in which, as was indicated before, there is a definite trend towards the use of capital intensive technology with its multiple marginalizing effects for the working population.

While it has been agreed that continued reliance by India on imports would create too much dependency for India,<sup>26</sup> the concern for the modernization of agriculture has also been generated by the decline of food surpluses in the United States,<sup>27</sup> as well as by the profitable implications of the import of needed inputs.<sup>28</sup>

Although the new agricultural strategy represents a new priority given to agriculture and the supply of food, this strategy is basically a continuation of previous rural development policies in that it is another, perhaps a last attempt, to by-pass the introduction of profound structural transformation of the social relationships within the country-side as well as



in the structure of relationships between the peasantry and those interest groups which control surplus extraction in the rural areas from the metropolis and smaller centers, relationships which, as suggested before, continue to be of 'a semicolonial nature'.<sup>29</sup>

The observation of the Indian home minister in 1969 to the effect that unless the Green Revolution is based on social justice, the green revolution may not remain green would seem to be a realistic warning. The issue could be formulated in another way by arguing that agricultural modernization (under present conditions as in India) ought only to be promoted within the context of structural maturity.<sup>30</sup> In other words, the strategy of the green revolution becomes meaningful and legitimate only in as far as it allows for and promotes equal opportunities and responds to the basic needs and interest of the population at large, in terms of work, income, and elementary dignity: in short, equitable participation in society, in the control and mobilization of its resources and the benefits produced therefrom. Such an approach to the problem contains an appeal to the classes in power to review their policies in terms of the concrete needs of the majority population.

Until now such an appeal has been answered by the introduction of successive improvements in the conditions of the poor which have demobilized them while increasing the process of accumulation and control over them which has happened through such programmes as community development, rural works, local government cooperative organization and marginal reforms in the agrarian structure.<sup>31</sup>

Would it be realistic to expect that the rural bourgeoisie to give up its power and the control of the instruments for monopolization of resources and opportunities on which their wealth is based? Such an expectation does not seem warranted if we study the actual behaviour of this class and the systematic and successful resistance to the pressures of the urban and industrial bourgeoisie to implement land reform. Such pressures are, however, in themselves contradictory since it may be argued that, while on the one hand it seeks to expand its market, the industrial bourgeoisie continues to rely on the rural bourgeoisie who are its major customer in the short and middle run. At the same time the urban industrial bourgeoisie has developed an interest in supporting the green revolution since it could contribute to the formation of surplus, needed for India's industrialization. In that sense the urban, industrial bourgeoisie is dependent on the rural bourgeoisie. Both of them together with the petit bourgeoisie, continue to assume the control of surplus through the maintenance of the semi-feudal or pre-capitalistic structure of relations in the rural areas, the rural bourgeoisie collaborate since it provides them with wealth and power and the opportunity to associate profitably with the urban bargaining the urban bourgeoisie.<sup>32</sup>

The persistence of such semi-feudal relationships, except for limited islands of capitalist agricultural modernization, is understandable in as far as such a mode of production offers the most 'successful' way of maximizing surplus.<sup>33</sup>

There is full compatibility between the maintenance of a low organic composition of capital in a major part of the agricultural sector, and the introduction of the capitalist mode of production in a small section of the agricultural sector. In theory a contradiction of interest may arise between the industrial bourgeoisie and the rural bourgeoisie. The former would press for low prices for the industrial working population (as well as for the rest of the population) in view of maintaining political stability, the emergence of a 'labour aristocracy' through the process of industrial monopolization together with the increase of capital intensive ways of production, may be understood as a response to the power of the rural bourgeoisie as well as a result of their own search for increased profit by the urban bourgeoisie within the context of the accommodation and the equilibrium agreed upon with the rural bourgeoisie. This is however not a stable equilibrium, in view of the pressures from within the monopolistic industrial structure and the pressure exercised on it by foreign monopolistic investments.

Is the increasing participation by the State in industrialization a way to overcome the problems arising from industrial monopoly in the private sector?



From the beginnings of planning in India, the entrepreneurs of major companies were active supporters of State planning<sup>34</sup> and have had a decisive influence in the activities undertaken by the State in the field of industrialization. There is enough evidence that those fields of industrial activity which have been left to the State represent most risk and the least profit.

While the growth of the Public sector, which represents nearly half of total industrial investment, has been slow as a result of increasing difficulties in the balance of payments among other reasons (India has even to export much needed steel in order to pay for her food imports) India has received substantial support from Russia, for the development of her heavy industries. On the other hand, the necessary imports for the development of the heavy industry have also been hampered by the increasing imports needed for the production of consumer goods, which led to what has been called 'pseudoindustrialization'.<sup>35</sup> Thus while the development of heavy industries had, as its original objective to produce capital goods needed for the production of other goods, the very orientation of the consumer industry stimulated it to produce for a production process which, as indicated before, responds to the wants of the minority population and not to the basic needs of the population at large. Thus there is a 'functional integration' between the Public Sector and the private sector -- the public sector supporting and contributing to the interests of the monopoly capital of the private sector. This is realized through the provision of cheap energy, transport facilities, and other inputs for the private sector. Thus we similarly see in the industrial sector as in the agricultural sector that the production and availability of inputs responds to the requirements of the groups who exercise a monopoly on the means of production, in this case, those for direct consumption. The view that it would be possible to peacefully realize a developed democratic society through State capitalism under Indian conditions<sup>36</sup> and that by developing the State sector the need for revolutionary changes would be obviated would seem questionable, particularly where such a policy is implicitly based on the assumption that a prior structural transformation of the agricultural sector is not of primary importance thereby supporting implicitly the orientation of the prevailing New Agricultural Strategy. Such a view is clearly based on an option for primacy of industrial growth especially in heavy industry, and the assumption that somehow in the process, the necessary social transformation will take place.

Since Independence there has been much emphasis in Indian Planning on the role of small scale industry as a complement of big industry. This was partly the fruit of the legacy of the past, represented by the views and the ideology of Gandhi with his bias against the city, industry, and mass consumption culture with its alienating and depersonalizing effects. It was at the same time derived from his ideal of self-sufficiency and his fear that the concentration of industry in the urban areas would threaten the population in the rural areas in its opportunities for productive work and would lead to increased labour under-utilization.<sup>37</sup> Among the arguments in favour of small scale industry are the fuller use of local resources, its multiplying effects, the provision of incentives for the rural population; in short, the need for and promotion of balanced rural development. In spite of the official emphasis on the need for small scale industry and the large amount of funds devoted to it, the programmes has been qualified a failure.

In spite of heavy investment from the first five year plan onwards the small industries programme created up to the end of 1967 in whole of India, only provided employment for 75,000 persons. This was partly due to the fact that contrary to the expectations of the Government, the entrepreneurs chose to produce commodities which were relatively capital intensive; secondly most factories worked below their capacity. While the programme was meant to contribute to local self-sufficiency by producing basic consumer goods, the State-subsidized small-scale industries started to produce inputs for other industries. One of the reasons of this conversion into subsidiaries of arrangements which also provided security.<sup>38</sup>

Another reason may have been the competition the small industries would have to face from the larger ones, particularly in urban areas. Although such competition in rural areas may have been less of a threat they may also have been turned into subsidiaries on account of the limi-



ted market, beside the desire for profit maximization. The distortion of the original objectives of the small scale development programme are indicative of the forces working in Indian Society, tending to subvert development and to subordinate the action of the State to the requirements and advantages of the Private Sector to the detriment of the majority population. The question must however be asked, whether it would be realistic to expect that the outcome of such a planning could have been different in a societal context in which monopolization of opportunities for profit is a predominant feature. The virtual absence in India of production of suitable capital goods as well as basic consumer goods for the rural majority population seems an inevitable consequence of the alliance as yet prevailing between the industrial and rural bourgeoisie and the growth pattern this produces...

There seems little room for doubt that the industrialization process in India directly contributes to the polarization process taking place between the rich and the poor and that it, like the New Agricultural Strategy, further deepens the already existing contradictions within society and unintentionally adds to the development of antagonistic interest between classes. While there is evidence that poverty in itself is unlikely to move people to undertake organized action against those who resist transformation (in view of the preservation of their privileged condition and the search for increased surplus appropriation, dictated to them by the very dynamics of the monopolistic competitive structure of which they are intentionally or unintentionally the agents and beneficiaries), it seems more likely that it is the deterioration of conditions which moves people to protest and organize themselves and act in self defence. Is such a situation developing in India?

It has been pointed out that in comparison to China the record of peasant uprisings in India is quite unimpressive.<sup>39</sup> Numerous local revolts have taken place over time in protest against various forms of exploitation. In particular the violent uprising at the end of the forties in the Hyderabad areas has been considered as indicative of the potential for revolutionary action among the Indian peasantry.<sup>40</sup>

A recent study by the Indian Government<sup>41</sup> recognizes that the new technology and strategy have been geared 'to the goals of production with a secondary regard to social imperatives' and that this orientation as suggested before has brought about 'a situation in which elements of disparity, instability, and unrest are becoming conspicuous, with the possibility of of an increase of tensions. Numerous land invasions are cited, a number of them of a violent nature as well as other actions such as the seizure of standing crops. Participants in such actions, which in several places have taken on the character of veritable movements, have in particular been poor peasants, tenants and landless workers. The emergence of such movements are specifically attributed to the 'denial of basic rights' to these groups, whether it regard to security of tenure, their share in the production, fair rents, wage payments, land distribution and, in general, access to services and facilities such as credit. It is recognized that an explosive situation may develop as a result of the combination of the continuation of the new Agricultural Strategy and the delay of measures to create new structural and institutional conditions to meet the demands of the agitating and land hung ry poor peasantry.<sup>42</sup>

The intention of the present Indian Government do not differ substantially from those of previous Governments in that they are characterized by radical principles. It is not unlikely that, as in the past, in practice it will combine its radical approach in terms of principles for transformation and reform with a pragmatic conservatism in practice.<sup>43</sup> There is a wide distance between the enunciation and planning of policy and its actual implementation. The New Congress Party as the old one also relies heavily on the old as well as new groups in the rural bourgeoisie who, in the States where land reform actually and in practice must be implemented, exercise control in the villages as well as within and on the bureaucracy charged with the implementation of policies. There are numerous ways in which the best intentions of the Federal Government can be circumvented.<sup>44</sup> Again can it be expected that the present power holders will voluntarily give up their position of privilege? Can transformation be planned? There is a good deal of historical evidence to assume that a land reform which is planned and carried out from above may tend to serve as a temporary stabilizer of an economic, social and political order that by its very nature is inimical to development.



Until a few years ago the successive Indian Governments seem to have been able to manage to control local protest movements and potential rebellions by a combination of improvement programmes and direct forms of control. The use of violent means of repression on a larger scale emerge, however, from the beginning of the Naxalite movement which started in Bengal and spread from there to various other States of India.<sup>45</sup> More recent invasions of large scale farms, including those of politicians in the Congress Party, have met with very severe action from the side of the Government.<sup>46</sup> Such actions make clear the insistence of the Government on the full protection of property, even when such property, or the resources it represents, are not or are under utilized while there continues a serious marginalization of the poor rural population without land and work.

There has been much insistence on the great 'resilience' and flexibility in the Indian social structure, particularly in the rural areas, by the accommodation of marginalized groups, the so called process of 'sanskritization' by which members of lower castes can move up into higher castes, continuing to adhere to the code of rules prescribed by the values of traditional society. Yet 'institutionalized inequality' through castes makes the recognition of common interests among various caste groups which belong to the same class difficult. Also there is relative absence of solidarity among the exploited sections of the peasantry as a result of the prevalence of vertically integrated factions and the intensity of control and dependence that has been stressed. The dependent poor peasants internalize the values imposed upon them by the dominant landlords.<sup>47</sup>

It would seem, however, that there is a combination of factors which would induce, in my view, more profound changes in the hitherto relatively submissive population, both in the rural and the urban areas.

One: the decline in foreign aid and, particularly, food aid which helped the Government in dealing with crisis situations in the cities. Two: the intensification of capital intensive industry and the one-sided modernization of agriculture, which on the one hand promotes marginalisation within the selected areas and on the other hand puts a break on the evolution of the agrarian structure in 'left out' areas which continue to be subject to a semi-feudal structure. Three: the increasing inability of the Government to support, in a sustained way, its strategy for agricultural modernization in view of its inability to touch the unproductive social surplus and to continue populist programmes (as that of community development) which served in the past to soften the situation for the poor. Four: the increasing dichotomy between the emerging rural and urban 'labour aristocracy' and the increasing non-utilization of people. Five: the continuing rise of expectations both in the countryside and in the cities and towns, due to increased communications and the impact mass media and conspicuous consumption by the minority in the context of stagnation and deterioration of conditions for the poor. Six: the pressures created by the rapid increase in population on which the forced campaign for population planning has only had a very limited impact and is likely to have less so in the future.<sup>48</sup> Seven: the need for the Government, as the representative of the ruling classes, to increasingly control the modernization process and isolate it from its impact in terms of its negative social consequences. The need to increasing use of force for control and containment seems inherent in the very development strategy which is being pursued. The possibility to successfully deflect the rising pressures and to channel them in such a ways that they indirectly lead to support and favour the prevailing objectives of growth, would seem to come to an end for the reasons above suggested.

The leeway open to the ruling classes to combine a declared policy of socialism and equal rights and opportunities for the whole population with a factual policy for more poverty, hunger and dependence than even before. If it is being suggested that profound structural transformation of and in Indian society have become inevitable, it is not because a revolutionary process is advocated but because it becomes inevitable in view of the development of the internal contradictions within this society as it has been shaped by the prevailing forces, and by policies, reflective of these forces.



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# SITUATION OF DOMINATION AND EXPLOITATION - 2. INDIA

## THE RICH

### POLITICAL DOMINATION

85% of politicians come from agricultural background, but 2/3 of them own above 10 acres and 38% more than 25 acres.

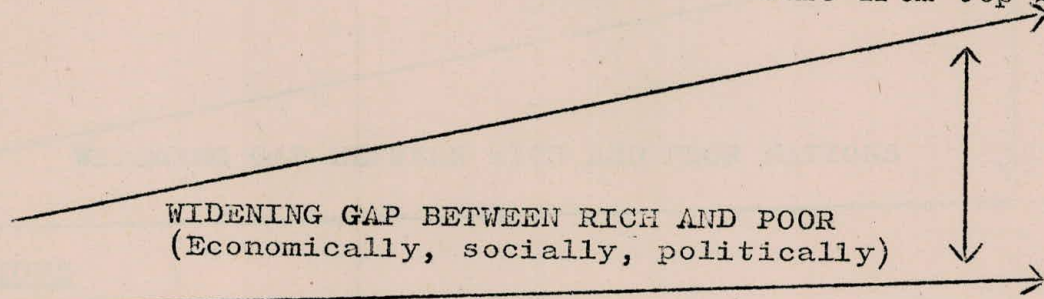
### ADMINISTRATIVE DOMINATION

80% of the personnel in I.A.S. I.F.S. and I.P.S. are drawn from the top 10% of Indian society.

10%  
of Indian  
Population

### ECONOMIC DOMINATION

1. Own 56% of the land
2. Get 1/3 of the yearly income of the nation
3. Top one tenth of one per cent own more than half the total wealth in form of shares.
4. 2% of rural households hold 25.7 per cent of rural wealth
5. Access to "quality education". More than 50% of students in professional colleges come from top 20%.



## THE POOR

### POLITICALLY EXPLOITED

They have hardly any political power.  
Most of them are unorganised.

### SOCIALLY

They are marginal

### ADMINISTRATION

A corrupt administration often takes advantage of them.

40 to 50% of  
Indian  
population

-They are absolutely  
poor

-They are illiterate (70%  
of Indian population is  
illiterate.)

Less than Rs.40 a month  
to spend (in 1970  
prices)

### ECONOMICALLY EXPLOITED

1. Own only 4% of the land  
(2)% have no land at  
all.
2. They claim less than  
1/3 of the total  
yearly income of the  
nation.
3. They have no access to  
shares.
4. Bottom 5% of rural  
households hold 7.37%  
of rural wealth  
(Bottom 20% = 0.8% of  
rural wealth.
5. Hardly any access  
to "quality  
education".

"ESSENTIALLY THE DIFFICULTY FACED BY THOSE WHO BELIEVE THAT IT IS POSSIBLE WITHIN THE EXISTING POLITICAL AND ECONOMIC SYSTEM TO INTRODUCE REFORMS WHICH WILL ENLARGE INDIVIDUAL FREEDOM AND MAKE POSSIBLE A MORE JUST SOCIETY, IS THAT THE SYSTEM ITSELF OPERATES PRECISELY TO EXCLUDE THOSE REFORMS."

-J.A.C. Griffith.



## SITUATION OF DOMINATION AND EXPLOITATION - INTERNATIONAL.

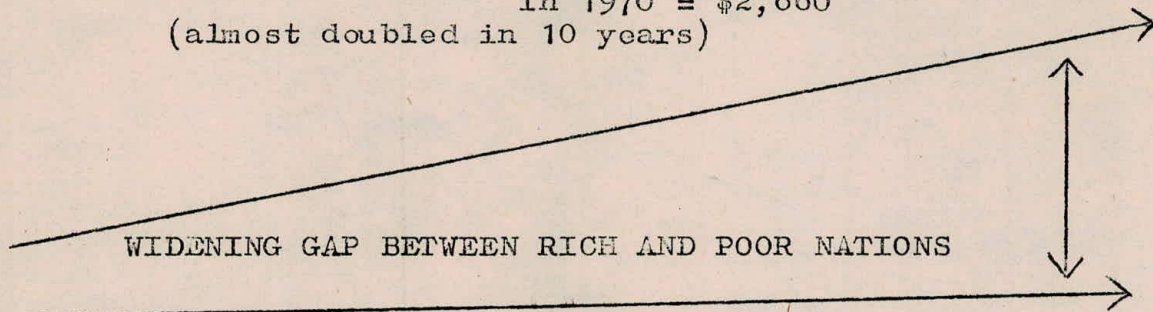
### RICH NATIONS

- They dominate international trade.
- They dominate international politics.
- They dominate international organisation.
- International judiciary institutions function in their favour.

RICH  
NATIONS  
1/4 of the  
world  
population

1. Consume 87.5% of the world's produced wealth.
2. Get 80% of the economic growth of the world.
3. 98% of the world's research.
4. Set the pace in scientific education.

Per capita income in 1960 = \$1,360  
in 1970 = \$2,660  
(almost doubled in 10 years)



### POOR NATIONS

They are the "object" of political decision.

very limited in international organisations.

#### POOR NATIONS

3/4 of the world's population.

- infant mortality 50 times as high as that of rich nations
- every second victim claimed by death is a child below 6 years
- high rate of illiteracy.

1. Consume only 12.5% of world's produced wealth
2. Get only 20% of economic growth of the world.
3. Only 2% of the world's research
4. Lags behind in scientific development.

Per capita income in 1960 = \$130  
in 1970 = \$210  
(Rise of 60%, compare with rich nations)

In 1939, 39% of the world population had to manage with less than 2000 calories.

In 1970, 60% of the world population had to manage with less than 2000 calories.

"TODAY 85%, TOMORROW 90% ROT IN MISERY IN ORDER TO MAKE POSSIBLE THE ECONOMIC COMFORT OF TODAY 15% AND TOMORROW 10% OF THE WORLD'S POPULATION." -Don Helder Camara.



## WHAT DO WE MEAN BY POLITICS

Politics is the language in which we discuss the way men live together, in society; and since living together in society is the normal human condition, by talking about politics we are talking about what it means to be a man, to be alive. All our experience is in this sense political; it has some relation to other men, to social reality. Politics is not only discussion of certain aspects of human behaviour - it is discussion of the structures and institutions which make a man what he is, for a man only comes into being through his society. Christ's teaching is political teaching, concerned with how men are to live together, not with man in isolation.

There may be an objection that this is an unfair use of the word "politics" that we are weighing our case by giving it an inflated significance. The objection is understandable if we look at the way the term has been narrowed to mean merely the techniques of government, the detailed business of getting and preserving power. Politics has become a matter of the public world - the world beyond our private, intimate experience - and the relation between our closest values and beliefs, and the impersonal world of political manoeuvring has become increasingly difficult to make. The temptation is therefore to reject politics altogether as a specialised pursuit for the ambitious and this is substantially what has happened in most Western societies today. "It's all politics", "politics is dirty", "I'm not politically minded" are phrases which have become part of our conversational wisdom. This kind of mental barrier can be best got over by seeing that this attitude is itself a deeply political one; if politics is reduced from a matter of ideology and human belief to a specialist profession the reduction will benefit those who wish to keep their own, dominant, ideology from being questioned. When a Liberal or Labour or Conservative MP says that public ownership is a matter of efficiency (not inefficiency), not of doctrine, ~~he~~ is making this kind of reduction.

This way of seeing politics, as a public matter divorced from our personal concerns, has a long tradition behind it, but it is not - even today - the only way of looking. To begin with, there are a good many people who would reject the idea that we can separate off our "public" from our "private" experience, and label the former as political, the latter as non-political. If we think about our actual experience of living in society, we realise that this kind of division will only hold as an abstraction. We are persons, individuals, because we are born into and shaped by a society whose language provides us with the terms within which we think and feel and act: we become individuals through society. There is no such thing as wholly private experience: our most intimate experience is derived from social reality of which we are a part. Our personal consciousness is not "given" a priori: it is shaped by culture and language and institutions of our society, and will change as these change. Our consciousness also creates and changes these institutions of course, so the process is two-way, a mutual shaping. Our personal life is therefore not something to be set over against society, the way we think, the possibilities of experience open to us, are matters of the public world, the world of our society.

So politics is not a matter of techniques alone: it is sometimes made into this by men who fear the consequences of seeing politics in its deepest sense, as offering new ways of living together, this is why politics is important to Christians.

There are different ways of creating community, of course, and the way which religious have traditionally recognised is by loving one's neighbour, acting loving to the people we know and meet.



But community and relationship, in modern industrial society, involves more than this immediate personal contact. In an industrial society we are all intimately related to each other, even without knowing each other personally at all; we are related through institutions like organised work, through the mass media and public services, through transport and cultural activities and the electoral system. What I do in my own life, in a factory is part of a whole industrial process which relates me, indirectly, to all the other people in my society; I am present to them, in relationship with them. By writing these articles we are present to people we don't know, hoping to influence them. Our concern with being present to others in a loving way, therefore must extend to include a whole society. We must learn to think of relationship in more than directly personal terms. These wider relationships, consisting of a whole society, are created through institutions - through legal, social, cultural, and economic structures. By changing these, we can change human relationships - and this, ultimately, is what politics is about.

So it is inadequate to think, as some have tended to in the past, of charity only as a personal quality, unorganised and spontaneous. Charity must indeed be spontaneous, but we have to learn to visualise a charitable, spontaneous society, one which expresses, in its formal institutions, in factories and cinemas and local government chambers, the kind of loving life which we can see now in our personal relationships. Personal charity will produce charitable groups and activities, but will do nothing to change the structures and institutions of a society. It may, indeed, make the situation worse by causing the inhuman results of these structures and thus diverting people's attention from their evil. The man who believes only in personal charity will tend to think that society will be healthy once all the individuals in it are kind to each other; he will fail to see that this personal kindness is an inadequate response to a society which, in its very structure - in the things which make it what it is - is dividing and degrading - men. We need a language that can describe a whole society's life, and action which will change a whole society, as a single organism. And both of these are politics.

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IS POVERTY THE REAL PROBLEM

Poverty is not the real problem of the modern world, for we have the knowledge and the resources which will enable us to overcome poverty. The real problem of the modern world, the thing which creates misery, wars and hatred amongst men, is the division of mankind into rich and poor.

We can see this division at two levels. Within nation states there are a few individuals who have great wealth and whose wealth gives them great power. But the vast majority of the people suffer from varying degrees of poverty and deprivation. Even in a country like the United States this division can be seen. In countries like India, Portugal or Brazil the contrast between the wealth of a few privileged individuals and the dire poverty of the masses is a crying scandal. And looking at the world as a collection of nation states we see the same pattern repeated: there are a few wealthy nations which dominate the whole world, economically and therefore politically, and a mass of smaller and poor nations whose destiny it appears is to be dominated. The significance about this division between rich and poor is not simply that one man has more food than he can eat, more clothes than he can wear, and more houses than he can live in, while others are hungry, unclad and homeless. The significant thing about the division between rich and poor, and rich and poor nations is not simply that one has the resources to provide comfort for all its citizens and the other cannot provide basic services. The reality and the depth of the problem arises because the man who is rich has power over the lives of those who are poor. And the rich nation has power over the policies of those who are not rich. And even more important is that a social and economic system, nationally and internationally, supports those divisions, and constantly increases them so that the rich get ever richer and more powerful, while the poor get relatively ever poorer and less able to control their own future.

This continues despite all talk of human quality, the fight against poverty, and of development. Still rich individuals within nations and rich nations within the world go on getting richer, very much richer, much faster than the poor nations can overcome their poverty. Sometimes this happens through the deliberate decisions of the rich who use their wealth and their power to that end. But often, perhaps more often, it happens naturally as a result of the normal workings of social and economic systems men have constructed for themselves. Just as water from the driest regions of the earth ultimately flows into the ocean where already there is plenty, so wealth flows from the poorest nations and the poorest individuals into the hand of those nations and those individuals who are already too wealthy. A man who can afford to buy only one loaf of bread a day contributes to the profit accruing to the owner of the bakery despite the fact that the owner already has more money than he knows how to use. And the poor nations which sell its primary commodities on the world market in order to buy machines for development finds that the prices it obtains and the prices it has to pay are both determined by the forces of the free market in which it is a pygmy which is fighting against giants.

Both nationally and internationally this division of mankind into a tiny minority of rich and a great majority of poor is rapidly becoming intolerable to the majority as it should be.



The poor nations and the poor peoples of the world are already in rebellion. If they do not succeed in securing a change which leads towards greater justice then that rebellion will become an explosion.

Injustice and peace are, in the long run, incompatible. Stability in a changing world must mean ordered change towards justice, not mechanical respect for the "status quo". It is in this context that development has been called another name for peace. It is in this context which gives urgency to your deliberations on participation in the development of the peoples. The purpose of development is man. It is a creation of conditions both material and spiritual which enable man the individual and man the species to become his best.

Men are creators of themselves and their conditions, but under present conditions we are creatures not of God but of our fellow men. For mankind has never been so united or so disunited, has never had so much power for good nor suffered under such evident injustice. Man's capacity has never been so clear nor so obviously and deliberately denied.

The world is one in technological terms. Men have looked down on the earth from the moon and seen its unity. In jet planes I can travel from Tanzania to New York in a matter of hours. Radio waves enable us to talk to one another, either in love or in abuse, without more than a few seconds elapsing between our speech and the hearing of it. Goods are made which include materials and skills from all over the world, and are then put for sale thousands of miles from their place of manufacture. Yet, at the same time as the interdependence of man is increased through advances of technology, the divisions between men also expand at an ever increasing rate. The national income per head in the United States is said to be more than \$3,200.000 a year: In Tanzania it is approximately \$80.00 per year. That is to say it would take an average Tanzanian forty years to earn what an average American earns in one year - and we are not the poorest nation on earth. Further it has been estimated that while the rich countries are adding approximately \$60.00 a year to the per capita income of their citizens, the average increase of per capita income in the poor countries is less than two dollars a year. It has been estimated that up to 500 million people on the earth today are suffering from hunger, from never having enough to eat. Further, one out of every two of the world's peoples is suffering from malnutrition, from deficiencies of protein, from rather essential health giving foods. And finally let me remind you that even within the wealthiest countries of the world the misery and oppression of poverty is experienced by thousands, or even millions, of individuals and families and groups.

So the world is not one. Its peoples are more divided now and also more conscious of their division, than they have ever been before. They are divided between those who are satiated and those who are hungry; they are divided between those with power and those without power: they are divided between those who dominate and those who are dominated, between those who exploit and those who are exploited. And it is the minority which is well fed and the minority which has secured control of the world's wealth and over their fellow men.

Those who control a man's livelihood control a man. His freedom is eroded and his equal humanity is denied when he depends upon others for the right to work and the right to eat. Equally, a nation is not independent if its economic resources are controlled by another nation. Political independence is meaningless if a nation does not control the means by which its citizens can earn their living. In other words, the development of peoples



follows from economic development only if this latter is achieved on the basis of the equality and human dignity of all those involved. And human dignity cannot be given to a man by the kindness of others; indeed it can be destroyed by kindness which emanates from an action of charity. For human dignity involves equality, and freedom, and relations of mutual respect among men. Further, it depends upon responsibility and on a conscious participation in the life of the society in which man moves and works. The whole structure of national societies and of international society is therefore relevant to the development of the peoples. And there are few societies which can now be said to serve this purpose, for there are few, if any, which both accept and are organized to serve social justice in what has been called the revolution of rising expectations.

The needs of mankind are second, if they are considered at all. There is no profit in producing cheap houses, so they are not produced. There is no money for schools and hospitals, but luxury apartments can be built, and six lane highways. For these things money can be found. And the result is a few men living in great luxury, using the wealth produced by men for their own grandeur and to ensure their own power. At the same time, masses of men, women and children are reduced to beggars, and to squalor, and to the humiliation of that disease and soul destroying insecurity which arises out of their enforced poverty. Let us be quite clear about this. Men are shaped by the circumstances in which they live. If they are treated like animals they will act like animals. If they are denied dignity they will act without dignity. If they are treated solely as a dispensable means of production they will become solely hands to whom life is a matter of doing as little work as possible, and then escaping into the illusion of happiness and pride through vice. Therefore, we must seek to ensure that man can have dignity in their lives and in their work. We must itself become a force of social justice and must work with other forces of social justice wherever they are and whatever they are called. Further, we must recognize that men can only progress and can only grow in dignity by working for themselves and working together for their common good.

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SCIENTISTS IN VILLAGES

"Here they come" says the villager  
As he gapes at all the visitors  
Who come to his Village to small  
Trying to teach 'n guide them all  
Is this a doctor to heal 'n cure  
The sick, the maimed, the lame 'n poor  
No, this one talks about sanitation,  
health, cleanliness and immunization.  
No drugs does he given nor pills  
Nor does he cure the sick 'n the ill  
Lectures he's given, his duty 's done  
He rushes away, waving to everyone.  
Here they come, from the department of agriculture  
Teaching about irrigation 'n fertiliser  
Crop rotation, tractors 'n pesticides  
About seeds, hybrids and weedicides.  
Parting with this know-how, they've done nothing great  
Of improving this agricultural state  
The farmers all gathered, away they go  
To toil in their farms, as they 'd done before  
Then comes the nutritionist, talking 'bout food  
Diet during disease 'n when health is good  
What foods to avoid 'n what to eat  
About protein foods like pulses 'n meat.  
The villagers all stare and gaze  
As they listen, all in a maze  
Home they go to cook and dine  
The Jowar roti 'n pickles of lime.  
The economist comes, with files 'n paper  
To see the per capita income of villagers.  
Of farm output 'n mechanization  
Which he can present in his dissertation.  
The health camp workers, troop in here  
With all their equipment and gear  
To be cured, the villagers rush to the front  
Little knowing that its a publicity stunt !  
"For what selfish reason did they come here ?  
"They help us not" says the villager  
"The Urban strangers come and go  
But our sleepy village goes on as before !

(SOURCE: mfc bulletin August 1981)  
Meena Panth  
Hyderabad



# Social Justice And



## Community Development

—Fr. H. Volken S. J.

"Today more than ever the Word of God will be unable to be proclaimed and heard unless it is accompanied by the witness of the power of the Holy Spirit, working within the action of Christians in the service of their brothers, *at the points in which their existence and their future are at stake.*" (Apost. Letter of P. Paul VI, May 1971).

It has come as a shock to many that the actual trend in development in India is towards greater disparity, towards increased social injustice. This means that there are many hidden forces of injustice at work in our society. It is possible that we too, without being aware of it may strengthen these forces. The challenge of the hour is, therefore, to examine and evaluate our personal and institutional work, in order to see what the *actual impact* of all this activity is on society as a whole. The religious sisters all over India are the first group in the Church who courageously have accepted this challenge, and have launched a nation-wide programme to find out what the practical implications of the new demand for social justice of our people are for their apostolate.

### THE COMMUNITY DEVELOPMENT PROGRAMME

When the Community Development Programme



was launched in 1952, on Gandhiji's birthday, it was expected to become a vast movement of liberation from poverty and social inequality in the 550,000 villages of the country. Some looked at this new nation-wide venture as a new star in the Asian sky. It was to prove that there is another alternative to the Chinese model of agrarian revolution. The years have passed by. During twenty years an immense amount of money has been poured into this Community Development Programme. In many regions of the country this programme has achieved remarkable physical results in terms of common amenities like schools, roads, health-centres and agricultural production. But in its essential purpose the Community Development Programme has been defeated: our villages have not been transformed into real communities in which the Harijans and the poor have been able to free themselves from hunger, illiteracy and abject poverty. The stronger section of the rural population rather than the weak have reaped the benefits of the Green Revolution which has increased remarkably agricultural production. To see thus the already well-to-do climb still higher has, however, opened the eyes of those left out from this process of change: they have gained a new consciousness. These marginal masses do no longer accept in a resigned and fatalistic spirit this increasing disparity; they increasingly feel frustrated and angry. They now know that they are condemned to remain in the grip of poverty because of the shrewdness and selfishness of the powerful and make even a community development programme work to their own advantage.

## THE MECHANISM OF DEVELOPMENT

Why does development, on the international as well as on the national level, increase the gap between the rich and the poor? This is the question that preoccupies more and more persons who are sensitive to this organised process of hurting the dignity of million who rightly aspire for more justice and real brotherhood. Why is it that after so much talk and planned development we go further away from these professed ideals in the actual reality of life? With regard to Community Development, a first answer was given some years ago by a special appointed evaluation committee. They said that this was due to the fact that Government planned and managed this programme and not the people at the local panchayats. When the whole village community will get involved in the programme new village communities will emerge from the rural scene. Again, years have passed. Today the despe-



ration of the rural poor is greater than ever. The Panchayati Raj has not changed their lot. Though in some places the Harijans do have an effective say in the panchayat, this new democratic institution is guided by the old spirit of narrow loyalties to one's family, and caste. It has heightened the motivation for achievement among the powerful groups in the village, but not the will to transform the village as a whole into a genuine community marked with a special concern for its weaker section. The village makes progress, but the harijan quarters remain as miserable and psychologically depressing as they have been when New India was not yet the dream of the nation.

### THE CHURCH AND COMMUNITY DEVELOPMENT

One would have expected that right from its start the new programme of Community Development has taught the imagination of Christians and the Church. It did not, neither in 1952 nor in 1972! Ideally there was a real challenge to a Church that has its origin in Jesus Christ the Great Community Builder! In rural christian communities the fear of contamination was greater than the sense of being sent into the wider community. Surprisingly, even after Vatican II which in the Pastoral Constitution expressed a new consciousness of the Church as being commissioned to be a leaven of unity, a force of transformation in the wider human community, the isolation of the rural Church from the Community Development Programme persisted. A new sense of social responsibility did come to life in the Church in many places. Many remarkable development projects were undertaken. Yet, even today, we probably can count on our fingers the Church sponsored projects *Which aim at creating a new community, a genuine brotherhood of the entire village.* This seems so strange when we know well that it is first on the level of a village that social justice and more equal opportunity for all, has to be realised. All the Churches have united, themselves in SODEPAX to promote social justice in the world. International Conferences have been held; 'Hunger for Justice' was the theme of an all India Christian Consultation in Delhi two years ago. On the local level, however, which is the place where action for Justice has to take place, the Church has not yet found a way to be a force of justice, counter-acting the present trend in village development by which the richer farmers grow richer and the small farmers and the landless do not grow except in frustration and desperation.

### UNREALISTIC TRAINING

Unawareness of the real possibilities of building new village communities, is the main cause of the



absence of the Church in the illusive community-building task the nation faces today. In this the priests and religious are the main defaulters, and this is because of the *inadequate training they have received*. It is amazing how we can excel in ignoring modern tools of work in the service of Christ. It took a long time before we discovered the new methods of group-dynamics and sensitivity training. Now we know how much these can help in building up small, intimate and effective groups. But we have not yet realised that there is a *hidden treasure in the community development approach and method*. The immense experience gained in developing a country, in understanding the dynamics and obstacles of community-growth during the recent past, has not yet entered the syllabus of Seminaries (in this Sisters formation centres are more advanced.)

### THE COMMUNITY DEVELOPMENT APPROACH

Unfortunately the Community Development Programme launched 20 years ago by the Government, ignores in practice most of the principles and methods of community development. In every village there is a God-given potential to become really a community through a new type of collaboration in a spirit of solidarity. At the moment our villages are full of facts which are an insult to God who wishes all His children to experience dignity and happiness. There is one bishop in India who believes that his mission of evangelisation must go together with the task of organising all the poor people in the area exploited by moneylenders and neglected by officials, so that they may be able to assert effectively their fundamental rights and have a place in a developing society. A group of student volunteers, of young priests and sisters are helping the victims of this unjust set-up become aware of the causes of their plight and helplessness. That this defenceless people should all of a sudden show courage and confront the powerful and corrupt in an organised manner came as a surprise to the dominant groups. Some of these are already undergoing a sort of 'forced conversion' out of fear. In course of time they may even be helped to act more justly towards the weak for more positive motives. Where the leaders and dominant groups are not yet willing to accept responsibility for the good of all the members of the village and exploit the weaker ones, conflict is inevitable. The exploited have to be organised first so that they can confront as partners the strong. If in this process some priests, sisters or laymen will incur persecution and even imprisonment, as it happened in the north, this will be for the glory of God and His Church.

A community development approach which involves





all the members of the community, high and lower castes, rich and poor, is the ideal. Gandhiji believed that this approach is possible in Indian villages, though some of his followers do organise suppressed harijan groups against landlords and money-lenders. In an ideal Community development programme the attitudes of all the people are changed. The more privileged begin to be concerned about creating real opportunities of progress for the poor, the poor are helped in this process to gain self-confidence and a will to participate in various development schemes. The ability to work in collaboration with all is fostered through concrete cooperative action. All grow as men in exercising new responsibilities to solve community problems of health, education, housing, production. A new community comes to life, a new spirit of solidarity fills the hearts and minds of the people. It is an illusion to think that priests, sisters and laymen cannot contribute towards making this ideal a reality, at least in a limited measure. Rare facts prove that it is possible if these are acquainted with up-to-date methods of community development and adult education through cooperative action.

In one of the best villages we have in India, I asked a village leader how the people from all castes have been able to work together for the up-lift of the whole village. He pointed to the priest of the place, who stood near by, and said: "It is because of our Father". He realised that all the betterment programmes that the villagers wanted to implement, would offer an excellent educational opportunity for a human and spiritual transformation of the entire community. It requires the involvement of priests, sisters and other christians in the common struggle of the whole community against poverty and inequality.

## EXTENSION METHODS IN COMMUNITY DEVELOPMENT

Community Development needs the support of Extension work. To illustrate this: the Extension Department of the University of Agricultural Sciences, Bangalore is assisting hundred of villages through their extension guides. These go into the villages and train the farmers on their own fields in modern practices of growing hybrid and high-yielding varieties. This same method of extension work is now being expanded into other fields like applied nutrition programmes, nutrition education, community health, treatment and prevention of leprosy. This is again a new approach which has developed rapidly during the past ten years. The 'social work' of the Church being so much confined to Institutions, has also in this field not been able to



keep pace with our times. Being in daily contact with persons professionally trained in extension methods, I am sure the fruits of christian social involvement would multiply a hundredfold, if only we would be humble enough to learn from others. Extension work not only means a new method of work, it also implies mobility. It means going out to many villages, instead of serving people only through an institution. In this approach volunteers are being trained in many villages to carry out some of the activities of the programme. One single sister could e.g., guide and animate an applied nutrition programme covering many villages, as it is actually done in Kottar Diocese. This expanded close contact with the people in many villages helps detect potential leadership. Some can be brought to the Centre for short term training. This method can be applied to many different programmes: agricultural training through demonstration, adult literacy, short term training of women and girls in practical skills in child care etc. In the Bangalore District a Sister has implemented an excellent poultry extension programme in which 30 families are helped to keep units of 100 birds.

### SPECIAL PROGRAMMES FOR THE SMALL MAN

Since two years the Government has implemented in many regions special programmes meant to give an opportunity of self-help to the weakest section; The Small Farmers Development Agency is to help the small farmer make his holding a viable unit. Special credit facilities and extension services to train him in modern methods of agriculture are provided by the Agency. Another scheme is meant for the marginal farmer and the landless. Such a scheme is operating in Goa. It offers special credit facilities for starting a dairy, a poultry, a cottage industry etc. These are wonderful schemes to create forces of social justice. They offer a first rate opportunity to people concerned with the poor to help them come to know about the existence of such facilities. In his helplessness the poor man often does not know how to go about to benefit from these schemes. I wish the CBCI had in its last meeting officially declared its determination to support these schemes. Here would be a wide field of supporting excellent official schemes. But again, do we know that they exist? We could, if we were closer to the people and less in Seminars.

All I have said does imply that we must make ourselves more free and competent to work where people

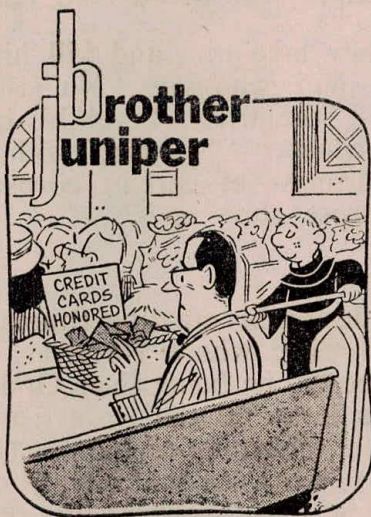


in *our* society, we are against him. If we do not fight for justice, we help continue injustice in our society and the oppression and exploitation of our fellowmen. Neutrality is impossible. Also, to us, Jesus directs his question: "What about you, do you want to go away too?" (Jn. 6, 67). When we say: "Lord, you have the message of eternal life", it means that we take God's side in all societal issues.

\* \* \*

**Note :**

*Without the cooperation and inspiration of many, this article would have been quite different. I thank all those who have knowingly or unknowingly contributed to this article, particularly Father Samuel Ryan S. J., who will recognize some of his ideas on the theology of liberation, which he shared at the CRI Regional Representatives' Meeting (2-3-1972).*



(contd. from p. 22)

are struggling. Community Development and Extension work does demand a re-orientation of involvement in social action and placement of personnel. In conclusion, however, I would like to affirm that there is no place and no institution, in which the spirit of community-living and social justice cannot be fostered. But even here this will be achieved much more successfully if some of us are community workers and extension workers who will help the rest of us keep in touch with reality, with people who long for a more dignified life and for more justice. □



personalizes. Hence "they are determined to kill him" (Jn. 11,53). However, it does not pay to kill the true prophets. "I tell you, if these keep silent the stones will cry out" (Lk. 19,40). Ignazio Silone, the Italian novelist underscores this:

In every dictatorship..... just one man, even any little man at all, who continues to think with his own head, puts the whole public order in danger. Tons of printed paper propagate the regime's orders of the day, thousands of loudspeakers, hundreds of thousands of posters and handbills distributed free, innumerable orators in the squares and crossroads, thousands of priests from the pulpit, all repeat, to the point of obsession and stupefaction, these orders of the day. And it is enough that a little man, just one little man, says 'NO' for that formidable granite order to be 'in danger.'

'Suppose they take him and kill him', said the girl—"Killing a man who says 'No' is a dangerous undertaking" said the priest, "even his body continues to repeat it in a whisper 'No, No,' with the tenaciousness and stubbornness of certain corpses. How can you make a corpse shut up?"

## Conclusion

Since God desires his creation (humanity) to grow into the Eternal City, where He lives, among man; they being his people, he being their God; a city where he himself wipes away all the tears from our eyes, a city without death, mourning or sadness (Rev. 21, 1-4), he calls upon *us* to work for that city, to create communities among men that provisionally reflect the new Jerusalem. The God of love has entrusted to us *his* concern for man's happiness, his well-being, his wholeness. Since justice is a condition for this community of love, all through history, God has been denouncing all forms of injustice and oppression and has championed the freedom of all men. "He who is not with me is against me, and he who does not gather with me scatters" says Jesus. If we are not with God in his concern for justice, if we are not with God in his concern for justice



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# Facing the rural facts

By BUNKER ROY

WHEN the anti-poverty programmes designed by the government show a remarkable reluctance to take rural realities into account, there must be something seriously wrong with the whole planning process. It is not that the vastness of poverty is overlooked: the trouble is that our planners, social scientists, economists, bankers, bureaucrats and social workers want to perpetuate certain myths. One such myth is that conflict need not necessarily arise in the attempt to bring about change or in the implementation of poverty eradication programmes, when the rural poor are being organised to assert their rights. The second myth follows from the first, which involves adopting the line of least resistance: that social change is possible (indeed inevitable) through economic change.

If people think it is possible to bring about socio-economic change in the rural areas without confrontation and conflict, they do not know their villages. The irony is that there are government orders which, if implemented, would lead to conflicts (which should be all to the good), but the delivery system is too weak to carry them out. For instance, an order comes that every scheduled caste locality should be given one hand-pump for safe drinking water. Now, would the Public Health Engineering Department (PHED) follow this directive scrupulously? No. In the name of scheduled castes, the sarpanch puts the pump next to his house. That means it is of no use to the supposed beneficiaries. In such cases, the advice to the scheduled castes is, let it be, why create an unpleasant situation because even if you protest, nothing will happen. Is this what we call development?

The 6th Plan document claims that 6.79 lakh acres have been distributed to 11.54 lakh landless people, of whom 6.13 lakh belong to the scheduled castes. All this is surplus land allotted to them by

the government. They have papers to prove it. Thousands have gone to court and fought for that land and the courts, the Revenue Board and all other authorities have said the land is theirs. But most of them still do not possess it. The rich farmer says, let me see you taking it, brother! The implementing agencies that are supposed to help the landless and protect their rights — the thanadar, the patwari and the sub-divisional officer — are all hostile to them. What can the landless do? We say keep quiet, don't create trouble. Is this the anti-poverty programme we have in mind?

No such programme will work unless the delivery system below the district level is strengthened. And that is not all. Any programme that pleases all sections — the rich and the poor, the higher and lower castes, the exploiter and the exploited — especially an economic development programme, must be a poorly designed programme. A programme to bring about fundamental change must hurt some sections — in this context, the more influential and richer sections. But many non-governmental organisations themselves, let alone the government, think this is no way of bringing about change. Why? Because they are ill prepared to face a conflict situation where their organisation might be threatened.

There is this mistaken notion that the rural vested interests will react sharply to awareness-generating programmes which involve organisation of the poor, but, they will allow non-governmental organisation as well as the government to implement economic programmes for the uplift of the poor. But will they? Why on earth should they co-operate in undermining their own hold on the village society? It does not make sense unless — and this is very likely — they are making fools of us all by consolidating their economic position

with the funds earmarked for the scheduled castes.

The anti-poverty programmes have been so ineffectual because their emphasis has been on infrastructural development (tangible and the easiest) and not on human development (intangible and more difficult to account for). Human development means getting involved in issues such as social justice, of which there is precious little mentioned in the Plan. It means getting involved in conflicts.

We make the mistake of confusing conflict with violence. We can be great promoters of non-violence and yet use potential conflict situations in the village for constructive purposes. The last thing we should do is to fight shy of facing such situations. Training of agricultural scientists, irrigation engineers, health workers and doctors is, no doubt, important. But why is there no training centre exclusively for the rural poor? The anti-poverty programme talks of people's involvement in planning and implementation. I ask, which people?

Do we need the participation of the 3 per cent of farmers with operational holdings of over 10 hectares, who cultivate more than 26 per cent of the total cultivable land in the country, or the 70 per cent with holdings of less than 2 hectares, who own barely 20 per cent of the land? Obviously, the latter. But then, is any attempt being made to provide them with the tools and the skills necessary for their participation? It is the 3 per cent, who in league with the local bureaucracy, distribute subsidies, projects, programmes and other opportunities in the rural field. Their hold on the poor is more than economic: they control the whole village. They decide which technology is most suitable, what is primitive and what is modern — with the result that the knowledge, the skills and the wisdom that the rural poor have been using for

generations for their survival have been branded as backward, crude, primitive and not conducive to the image India wants to project abroad.

People's participation is a two-way process. It implies we are ready to accept the people — even the rural poor — as partners in the development process and willing to learn from them. Myth. We are yet to accept them as equals. Even more tragically, we are not willing to believe that they have something to teach us.

The truth is that the delivery system has never been put to a test. The revenue, the judicial and the law and order systems, because they are in the hands of the dominant few, have always operated on the lines that conflict would be a reflection on their efficiency and it must not be allowed to be seen in public. Anything for silence — an appearance of peace.

Another distressing aspect is the communication gap in regard to the anti-poverty programmes. While we are giving ample importance to satellites, colour television and field publicity units (incidentally, they are defunct in most districts), there is a wealth of talent lying unutilised in the villages — roving minstrels, local theatre groups, puppeteers living a hand-to-mouth existence, whose skill in communication we are not prepared to recognise. They could communicate developmental ideas more effectively than posters, television and radio. But the development of such skills is put under the classification of 'Culture'.

In short, if we are not prepared to let people develop themselves, to give them the tools and training to be self-reliant, if we are not willing to treat them as equal partners and learn from them what they know better, then we might as well not have this farce of an anti-poverty programme. After all, we are only deceiving ourselves: certainly not the millions living below the poverty line.



## "Action research" in health programmes

Oliver Razum, Regina G6rgen, & Hans Jochen Diesfeld

*Deficiencies in a health programme or service can be analysed, and solutions can be developed and tested, through operational and action research, the distinguishing features of which are explained below.*

The results of operational or action research allow managers to tackle problems affecting particular health programmes and services, and subsequently to assess progress. Decisions are based on evidence collected specifically for the purpose, rather than on the experience or common sense of the managers concerned.

Whereas operational research is usually performed by an outside worker in order to ensure objectivity, in action research the investigator is attached to the service or programme requiring attention and is involved in planning and introducing policy changes and subsequently in monitoring and evaluating their effect. An insider is likely to be familiar with aspects of the problem needing study which an outsider would not be aware of. Furthermore, an insider should be comparatively well equipped to translate findings into sound action plans, thanks to a better understanding of what changes are possible and how they should be explained to the persons affected. An inside researcher spends much longer in a district than one from outside and is therefore in a relatively good position to monitor the consequences of whatever measures are taken.

Occasionally, of course, insiders conducting action research may make light of their own shortcomings and those of the people in the activity under investigation, and this danger has to be guarded against. However, it has to

be remembered that mistakes made by health workers often arise because of deficiencies in services or programmes. For example, nurses may fail to give all antigens on the same day to unimmunized children aged nine months because they have not been trained to do so. In such circumstances it would be counterproductive to place blame on the nurses, as might happen if an outsider were carrying out the research.

Whereas in operational research the study population may merely become involved in data-gathering, in action research there is continuous interaction between the researcher and the people who are the subjects of study. It is important that the researcher should establish a rapport with the population studied, for whom an open, mutually respectful exchange of information, opinions and ideas can provide an opportunity to participate in decision-making at district level. The use of qualitative methods can facilitate the onset of a communication process. Representatives of the study population should also contribute to the interpretation of findings, for instance during specially organized workshops. This can help to identify fundamental problems in a programme and to avoid unjustifiable attribution of blame.

Action research is particularly suitable for identifying underlying reasons for deficiencies in programmes or services because it involves the recognition and analysis of problems by both health workers and their superiors working together. Their discussions contribute to

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mutual understanding, motivation and the acceptance and correction of shortcomings.

The development of communication between users and providers of services may help greatly towards achieving improvements, although community members may be reluctant to speak freely to insiders because of a fear of adverse consequences. Of course, they would probably be even less open with an outside researcher whom they did not know at all.

The methods or instruments of action research should be selected according to the problem that has to be tackled, and not on the basis of availability or personal preference. The methods of social science, including interviewing, observation and document analysis, can be used alone or in combination with bio-medical or epidemiological measuring techniques such as immunization coverage surveys. The combination of different methods in the study of a particular aspect of a situation can help to overcome a selective perception of reality and makes it possible to crosscheck the validity of results. For instance, in a study of the performance of immunization services this could mean organizing focus groups on mothers' attitudes to immunization in conjunction with a coverage survey aimed at assessing their actual participation.

In action research the starting point may be the description of a perceived problem rather than the elaboration of a formal hypothesis, such as might happen in conventional scientific investigation. In general the design of action research cannot be fixed in advance, a flexible approach being adopted so that light is thrown on different aspects of the problem in a step-by-step fashion. Interim findings may make it necessary to adopt additional research instruments.

Action research is management-oriented and the methods employed should therefore be simple. The accuracy of data needs only to be sufficient for decision-making, and their quantity should be small enough to allow rapid

processing and timely application of results. Although computerization accelerates the collection and processing of data it cannot be a

***Whereas in operational research the study population may merely become involved in data-gathering, in action research there is continuous interaction between the researcher and the people who are the subjects of study.***

substitute for sound treatment of methodological issues and is by no means indispensable in action research. It should be borne in mind that small population samples may not be representative, placing impact evaluation – for instance the measurement of changes in the incidence of diseases targeted by immunization programmes – beyond the scope of action research.

The findings of action research can contribute to the improvement of service quality in the setting where they are obtained. Action research is particularly suitable for district managers wishing to assess and improve elements of service quality such as accessibility, performance of activities according to standards, and acceptance by users. Both accessibility and utilization can be assessed quantitatively, for example by means of a coverage survey.

Adherence to standards can also be studied in a highly structured way, for instance by using a checklist to assess workers' activities. However, if activities are not being performed correctly it is necessary to adopt a more open approach, involving interviews, focus groups and so on, in order to discover why this is so. The use of a structured questionnaire may fail to reveal underlying factors that the researcher has not envisaged. Similarly, it is vital to identify reasons for non-acceptance of services so that improvements can be planned; the use of less structured instruments is invaluable in this connection and favours the participation of the population concerned. ■



*AN OVERVIEW OF UPDATED CONCEPTS IN  
HEALTH AND  
DEVELOPMENT*

*AN ELECTIVE STUDY REPORT*

*DINNIES.V.J.*

*PGDCHM-*



## ACKNOWLEDGEMENTS

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## **INTRODUCTION**

The Department of RUHSA in CMC, Vellore conducts a one year Post Graduate Diploma programme in Community Health Management. A three weeks elective study is done as part of the course. The present study was undertaken as part of the elective study. The methodology consisted of literature review and discussion with faculty members. The study was done between 10-3-03 to 29-3-03 in RUHSA. Whenever the textbook of preventive & social medicine is mentioned it means Park & Park 17<sup>th</sup> edition. The conclusions derived are by no means final and should be adapted to the ground realities of the particular region.



**GOAL-** an overview of updated concepts in Health and Development

**OBJECTIVES**

1. To cite reasons for why health and development should go together.
2. To define health and development status in developing countries.
3. To suggest realistic objectives for a community of 50,000 population in a developing country.
4. To discuss areas of community participation.
5. To identify areas where specialist care is required.
6. To identify ways and means of providing specialist care in a rural setup.
7. To describe guidelines in setting up a health and development agency.
8. To identify ways and means of ensuring sustainability.



## WHY HEALTH AND DEVELOPMENT

"The attainment by all peoples of the highest level of health"

This is the stated objective of World Health Organization, the WHO defines health as

"A State of complete physical, mental and social well being and not merely the absence of disease or Infirmary"

The preamble of the constitution of WHO states in unambiguous terms that

"The enjoyment of the highest attainable standards of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic and social conditions"

It is clear from these statements that WHO and in turn UN recognizes health as a fundamental human right. Each and every word is loaded with meaning A Black man, A White man, one living in a totalitarian state, one living in a democracy, A poor man, A rich Man, Every one is entitled to have the highest possible standards of health as a fundamental human right. Any act involving the capability deprivation of a man or woman or child which in turn leads to ill health is an affront against a fundamental human right. It can be a denial of access to safe drinking water; it can be a denial of access to proper RCH care. It can be a denial of primary education to a girl child.

## CONVENTIONAL HEALTH CARE: -

The conventional health system is said to have the following features from a sociological point of view.

1. They are predominantly urban oriented.
2. They are mostly curative.
3. They are accessible to a minority.

If we take the converse of these statements the picture becomes much more clear.

I.e.,

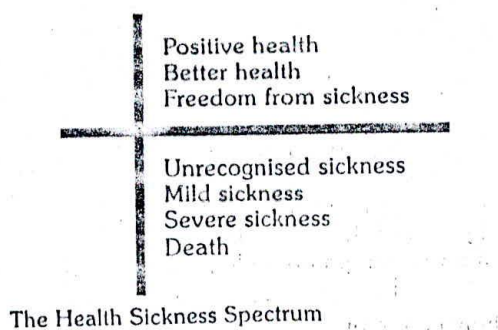
1. There is no rural orientation for the existing health care systems.
2. The present system is not oriented towards prevention.
3. The health care is not accessible to every one.

*development?*  
*health and development*  
*man?*

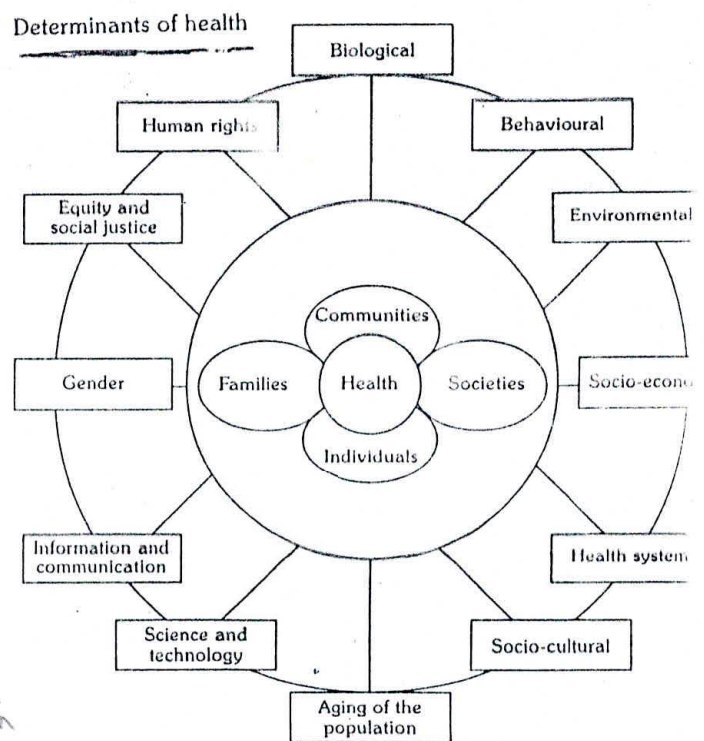


All these factors assume serious proportions when taken in the context of a third world country. Majority of the population in a third world country live in rural areas. In these areas the access to health care is remote at best and non-existent at its worst. In other words a man living in a rural area is denied a fundamental human right just because of his place of domicile.

The present health care system focuses mainly on the curative aspects of medicine. The system comes into play only after a person is afflicted with a disease. The modern medical wisdom treats the human body as a rather complicated piece of machinery, which breaks down every now and then and needs some fixing. But now we know that a person cannot be treated in isolation with his environment. The host and his environment constitutes 2/3 of the disease process while the causative agent as such plays only 1/3 part in the aetiology of disease. 80% of the diseases can be controlled by simple rest and some slight change in the lifestyle. This part of treatment is most often ignored in the conventional medical treatment. After fixing the trouble the machine is reset in the same environment. More often than not the machine breaks down again. This feature of modern medicine has become so deleterious that some authors consider medical establishment as the biggest threat to health. (Ivan, Illich, limits to medicine). The one and only solution for this problem is a paradigm shift in health care system towards preventive aspects of medicine.



*Food and nutrition  
Agriculture  
Education  
Income - purchasing power  
Work  
Exercise, life style  
Water supply and sanitation*



The last important negative aspect of the present health care delivery system is the inaccessibility. The medical personnel have become entrenched in their urban ivory towers. In the morning they emerge from their air conditioned bedrooms to their air conditioned cars and work in their air conditioned clinics. Proper healthcare is beyond reach even for the urban poor, let alone the rural pastoralist. Here we see the very medical establishment itself contributing to an affront to a fundamental human right. No wonder authors like Ivan illich consider medical establishment as the biggest threat to health.



## ALMA ATA AND AFTER

In 1978 Alma Ata hosted an International Conference on Primary Health care. This conference was convened under the auspices of Health Assembly of WHO and executive board of UNICEF. Alma Ata is the capital of Kazakh Soviet Socialist Republic in former USSR. The conference took place from 6<sup>th</sup> to 12<sup>th</sup> September 1978. The conference decided that the health status of hundreds of

millions of people in the world is unacceptable. More than half the population of the world did not have the benefit of proper health care. The motto Health for All by A.D.2000 was proclaimed during this conference. The conference called for a new approach to Health and Health care, which was to be built upon a sound basis of Primary Health Care (PHC). Along with the primary Health Care the development aspect also was to be given due importance. The very first recommendation of the conference reads,

The conference,

Recognizing that health is dependant on social and economic development, and also contribute to it,

Recommends,

That the Governments incorporate and strengthen PHC within their national development plans with special emphasis on rural and urban development programmes and the Co-ordination of health related activities of the different sectors.

The conference also decided that any distinction between economic and social development was no longer tenable. There can not be any social development without economic development. The conference envisaged that the PHC there is no social dev can't economic dev. There is no eco dev can't social dev the will help people to contribute to their own social and economic development. In other words PHC is an integral part over development of society.

This was the first time that an international body identified and proclaimed the inter relationship between health and development. So, after Alma Ata 1978 there is no room for doubt about the integration of health and development.

The Alma Ata Conference identified 5 principles on which to base these health and development activities. These are,

1. Equitable distribution - All the people should have access to health services Irrespective of their ability to pay. The inability to make health services accessible. To all tantamount to social in justice.
2. Community participation individuals families and communities should be actively involved in promotion of their own health, the Governments should drop the top-down beurocratic approach in implementing primary health care.
3. Appropriate technology that is scientifically sound, adaptable to local needs, and acceptable to those who apply it and those for whom it is used and that can be maintained by the people themselves, using resources that can be afforded by, the community or country.
4. Focus on prevention - This was the major change in orientation of the healthcare delivery systems. While most of the systems focused on curative aspects of healthcare, PHC should stress on the preventive aspects of Health Care.
5. Intersectoral co-ordination - PHC should not work in isolation from other sectors. According to Alma Ata declaration primary health care involves in addition to the health care sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, communication and other sectors.

In short the primary health care and community development should go hand in hand.



## HEALTH & THE STATE OF DEVELOPMENT IN A DEVELOPING COUNTRY

The title calls for a definition of a developing country. There are any number of definitions available. Some consider any country other than US a developing country, some include all countries other than G 7 as developing countries, and some specifically take sub-Saharan, African, South East Asian countries, Oceania minus Australia and New Zealand as developing countries. But it is not very easy to define a developing country. Some of slums in developed countries have socio-economic status comparable to sub saharan Africa. Within a developing country urban areas can be as affluent as any downtown area in a developed country. This paper proposes to concentrate on rural poor in a developing country.

World population by continents		%
Asia	3721	60.66
Africa	813	13.25
Europe	726	11.84
Latin america&Caribbean	527	8.58
North America	317	5.17
Oceania	30.9	0.50
Total	6134	100.00

source Manorama Year Book-2002

### Why focus on rural poverty

1. Poverty is rampant in developing countries and it is growing day by day.
2. In a developing country majority of the people live in rural areas.
3. Poverty in rural areas is not only wide spread but it is also deep and severe.
4. A large number of rural poor are vulnerable to external shocks, natural disasters, conflicts and spread of diseases.
5. New initiatives are required to bring the rural poor to the center stage of development.
6. Few developing countries will be able to meet the international development goals particularly in the rural areas.

## THE CRITERIA USED IN THIS PAPER

### Criteria

1. 40% population below poverty line
2. 30% people illiterate
3. 50% people don't have safe drinking water
4. IMR is > 80
5. Doctor: population ratio is more than 1:5000



### **SOME REALISTIC OBJECTIVES FOR A POPULATION OF 50,000**

The objectives will be based on the criteria used for identifying the target population. Thus the objectives will be,

1. Reduce number of people living under poverty line to at least 25%.
2. Make at least 75% of the people functional literates.
3. At least 75% of the people should have access to safe drinking water.
4. The IMR should be brought down to <100.
5. The health care system should be improved so that the Dr: patient ratio is at least 1:5000

One sound managing principle says that your objectives should always be SMART. Each letter stands for one attribute of the objective viz.,

1. Specific
2. Measurable
3. Attainable
4. Realistic
5. Time bound

The same principles can be applied in the case of a health and development project. Along with these some approaches in community development also can be utilized. These are

1. Sectoral approach.
2. Integrated approach
3. Educational approach
4. Regulatory approach
5. Service approach
6. Technology transfer approach



food security to all the people in the world at international level. Recently this aspect of PHC has become more and more threatened after the globalization. In the 25 years after Alma Ata the situation has actually worsened. Every other year one of the sub Saharan nations is hit by famine and subsequently starvation deaths.

There can be no state of positive health and well being without safe water. Water should be easily accessible, adequate in quantity, free from contamination, safe and readily available throughout the year. In 1980 the UN general assembly launched the international decade on drinking water supply and sanitation. The stated goal of the decade was to provide all the people safe drinking water & the sanitation by the year 1990. Another decade has gone by after 1990 and still we are now here near the attainment of this goal.

By definition MCH is an integral part of the PHC. This is an area where technical inputs can be translated in to solid outcomes like reduced incidence of IMR, MMR and childhood infections. Rapid strides have been made in this area. The top down beurocratic structure in most of the developing countries were instrumental in bringing about this change. But they failed to produce the final thrust in reaching the masses. This is an area where only an NGO working among the masses can show the results. Some reason for the failure of this aspect is the inability of the government agencies to recognize the potential of NGOs in this field.

Immunization against major infectious diseases has been more or less successful. It has brought down the morbidity and mortality rates due to major infections diseases dramatically. Prevention & control of locally endemic diseases like Malaria, worm infestations, Dengue etc have been brought under control. A new health and development organization should address these problems at the maintenance level.

The appropriate care of common diseases calls for more wide spread reach of health programmes. Most of the developed countries have their own existing traditional healing systems. Some of these systems are based on practical wisdom gleaned through centuries of experience. These should not be looked down upon when implementing PHC. It is more sensible to integrate these systems in to the PHC.

Provision of essential medicines calls for international co-ordination on an intersectoral basis. Sensible down to earth managerial skills are needed here.

*irrational use of drugs  
= patent*



## COMMUNITY PARTICIPATION

The Alma Ata recognizes community participation as the major basis on which to build PHC. Since health is influenced by a number of factors such as adequate food, housing, basic sanitation, healthy lifestyles, protection against communicable diseases the frontiers of health should extend beyond the narrow limits of medical care. This is not possible without community participation. In other words the medical care is no longer synonymous with health care. Ideally PHC should be a do it yourself concern of each & every individual. Further more PHC cannot function in isolation with socio-economic development of the community, especially the first four. Activities in one sector overlap with activities in another sector. In PHC any one of the sectors in community development can act as an entry point for an overall health and development organization. An overview of these sectors will provide a picture of the potential of community participation

## AGRICULTURE

The agriculture sector is particularly important in most the developing countries. The majority of the people in these countries are involved in agricultural activities. The food security and adequate nutrition, which is the second element of PHC, cannot be realized without co-ordination with agricultural sector. In some countries this may mean a basic policy change at national level regarding the patterns of land tenure. In some other countries it may take the form of promotion of kitchen garden among rural women. Whatever may be the methodology adopted there can not be any doubt regarding the importance of agriculture sector, especially in developing country.

## WOMEN EMPOWERMENT

The element of maternal and child healthcare including family planning can mean much more than what the words imply. In most of the developing countries majority of rural women are not involved in any productive work. This means that nearly half the population is idle. Even a small change in the situation will make a noticeable change in GNP situation. Women and children constitute a particularly vulnerable group of the population from a health point of view. Any calamity or natural disaster affects these groups first and the impact is more pronounced for these groups. This mitigation of these problems involves much more than just provision of antimalarial care it calls for a conscious at woman centred developmental strategies, woman need appropriate technology to lighten knowledge about maternal & child nutrition should be imparted to men so that they can properly feed the children in available resources. Each & every woman should be able to take care of herself during pregnancy and lactation. This will be the ideal of community participation in PHC women SHGs In SEAR countries is a small step in this direction.

|| ? rural women are overworked.

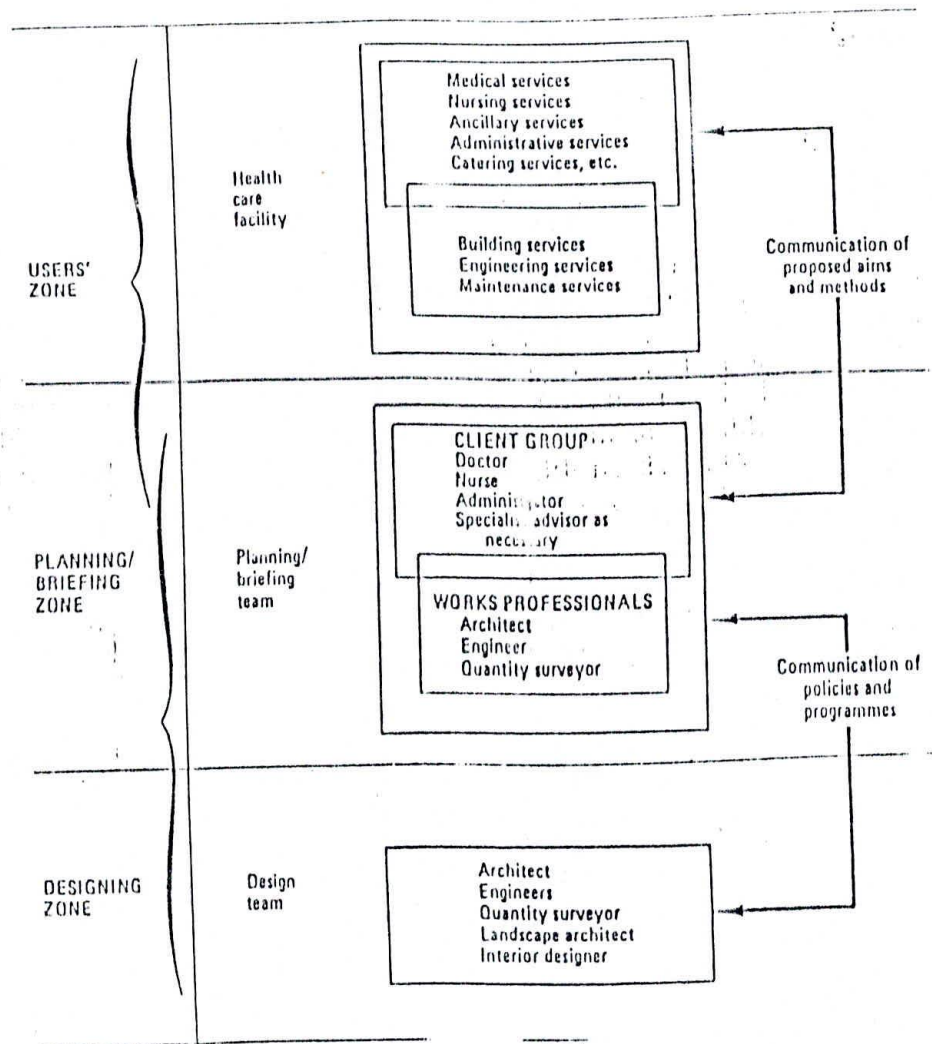
## SAFE DRINKING WATER AND SANITATION

This element of PHC can never be implemented without community participation. The very startly point of public health in the history was the

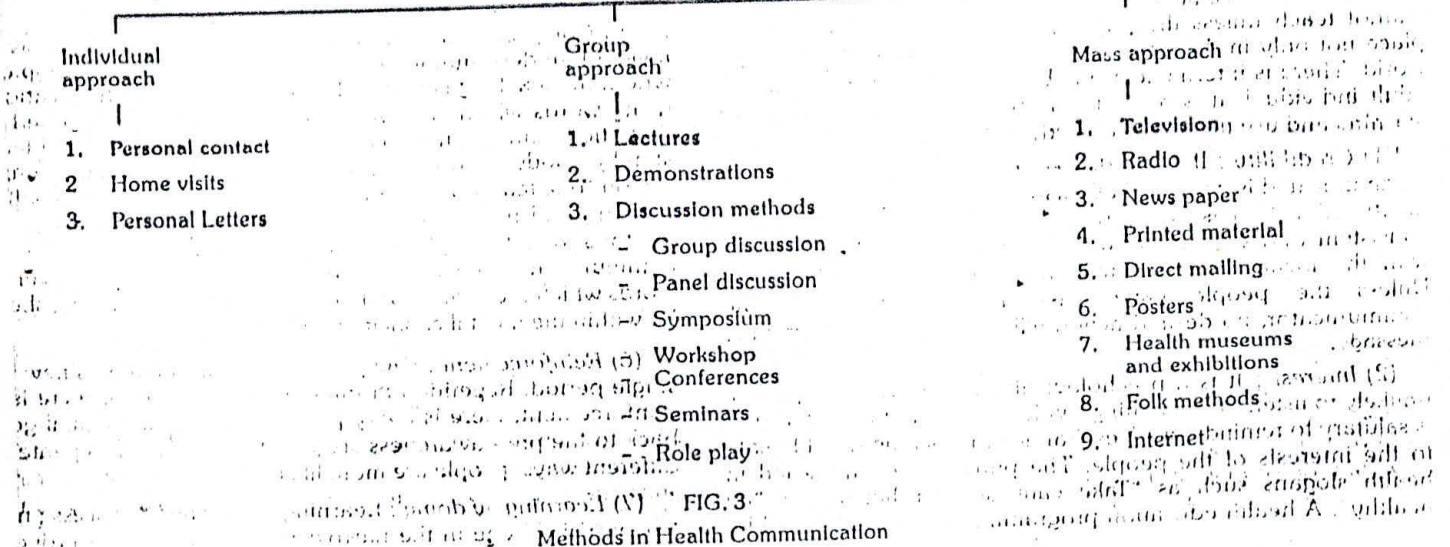


## PROJECT PLANNING

### The multiprofessional planning team

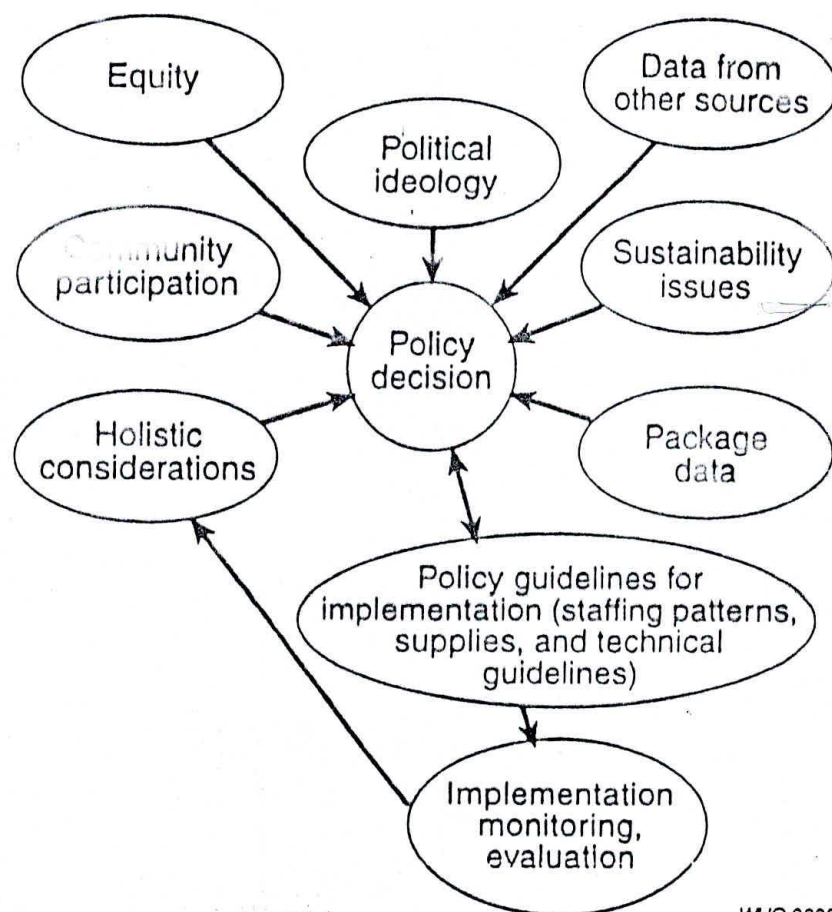


### Health Communication





The package as an aid to decision-making, as one of many inputs



WHO 98258



identification of contaminated water as a source of infection diseases. In the 18<sup>th</sup> century, itself it was known that it is possible to reduce morbidity and mortality due to certain disease by the use of uncontaminated water. Plentiful supplies of clean water helps to reduce mortality & morbidity in particular among infants and children. It makes life easier for women. The official UN programme and most of the national programmes failed to achieve the set goals. The only possible alternative is a bottom up approach beginning at the community level.

Along with the supply of safe drinking water provision for proper environmental sanitation also should be taken care of. The safe disposal of wastes and excreta has significant influence on health. Again this cannot be achieved without community participation. Education in the proper use and maintenance of water and sanitary facilities is important. Another important aspect of proper environmental sanitation will be proper housing. Houses should be proof against not only the elements but also against insects and rodents that carry infections and zoonoses. All the structures in a house should be easy to clean, especially kitchens and sanitary facilities.

## **EDUCATION**

The very first element of PHC as stated by Alma Ata 1978 stresses the importance of the educational approach to health care especially preventive & promotional aspects. Community education helps people to understand their health problems. It will lead them to possible solutions and alternatives. Instructive literature can be developed and distributed through a well laid out community education system.

The mass media can play a supportive role in the educational aspects of PHC. The media can disseminate valid information on promotion of health. One fine example of the use of mass media in the promotion of health is the pedal operated or hand wound radio sets used in sub Saharan African countries for the spread of information on HIV/AIDS (The rural areas in these countries do not have supply of power. So the conventional mass media are not practical.)

## **SPECIALIST CARE**

The Alma Ata 1978 envisaged a PHC system, which worked under a protective umbrella of logistic and financial support provided by other levels of health system. The secondary & tertiary levels of the health system was expected to provide skills, guidance and training. PHC cannot have a stand alone existence without the backing of a sympathetic conventional health care system. This system is necessary to ensure that people enjoy the benefits of useful technical knowledge that is too complex or costly to apply routinely through primary health care.



There are mainly 2 models of provision of specialist care under PHC

1. Referral services
2. Regular speciality clinics / camps.

Both models are quite efficient if used on a case specific manner. For example it is absolutely necessary to refer a case of complicated cardiac arrhythmia or a case of Icterus grans neonatorum. But it will be foolish to refer a patient to the central hospital for a shot of preventive vaccine. It makes more economic sense to organise a clinic or camp at the PHC level itself with community participation and get as many people as possible, immunized. Once it is decided to organize a camp or a clinic it is necessary to decide ,

1. What specialities should be represented
2. At what intervals the clinics be organized.
3. How can the community participation be ensured.

The statistics on the prevalence of diseases that require specialist's care should be a good pointer to the appropriate course of action. This paper identifies the following areas of intervention through specialist care

1. Orthopeadics
2. Ophthalmology
3. Otolaryngeology
4. Psychiatry
5. Neurology
6. Dentistry

### **Orthopeadics**

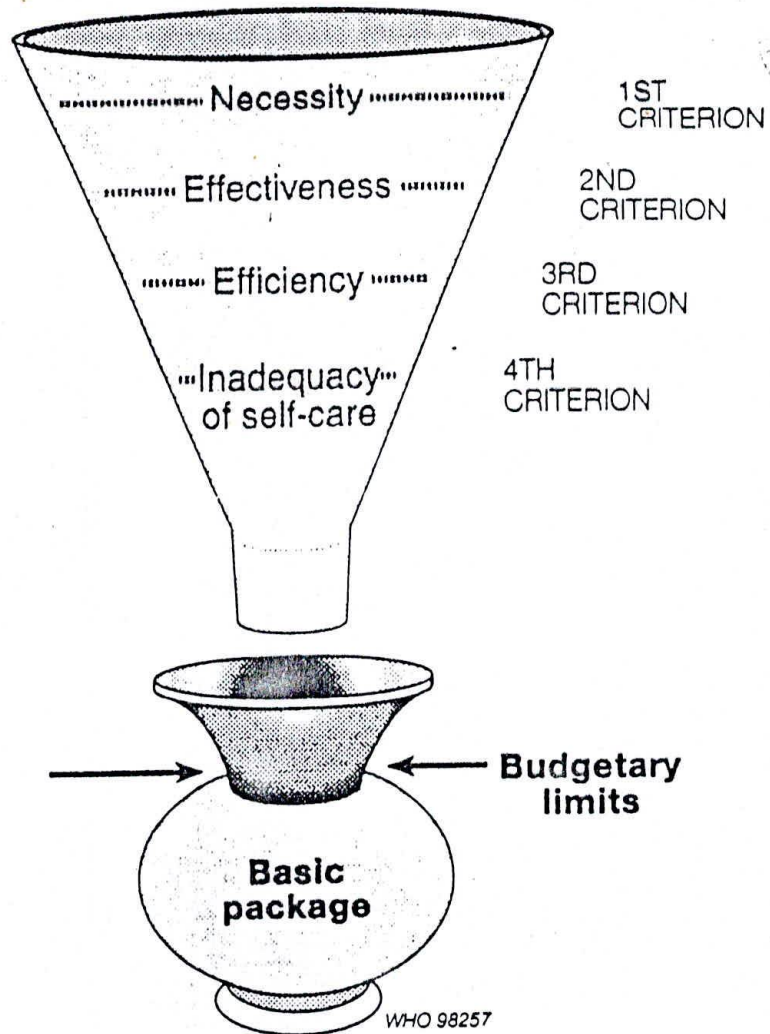
For a person an orthopeadic handicap is a deterrent to his normal functions in society. It can be at different levels Viz.,

1. Disease
2. Impairment
3. Disability
4. Handicap

The consequences of these can be transient or permanent. In such cases PHC has a duty to provide appropriate disability limiting measures and rehabilitation .In recent years the word ,community based rehabilitation as come into vogue. The UN declared the decade of disabled persons from 1983 to 1992. The theme of the decade was "Full participation and Equality" .This kind of theme can become real only if the PHC and the community, co-operate for the welfare of the community



Basic package through "sieves of a funnel" approach

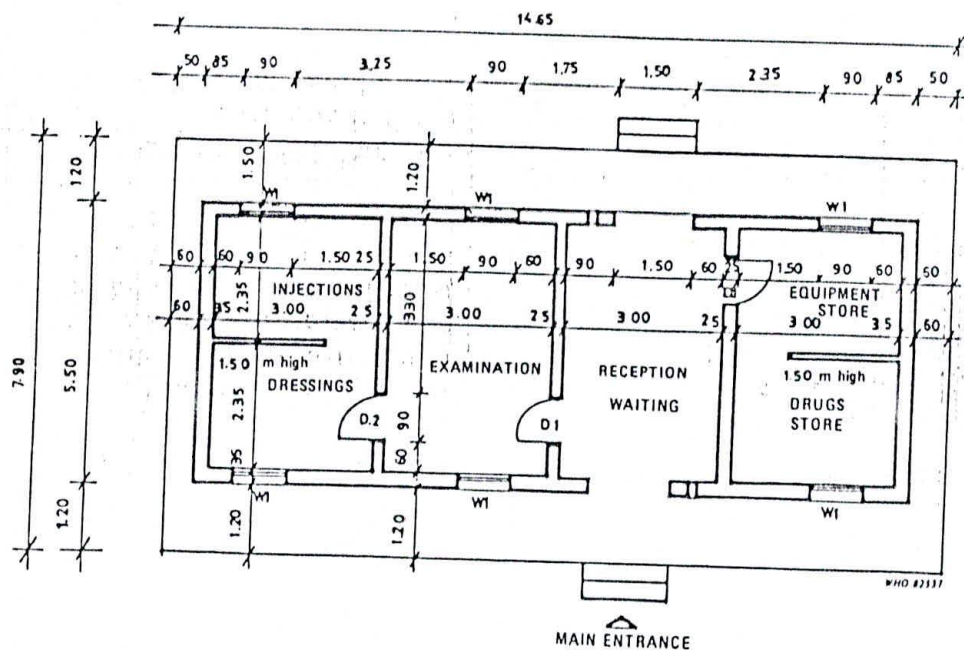




## Steps in planning

1. Develop a guiding document
2. Conduct a stakeholder analysis
3. Identify problems in the community
4. Assess community needs
5. Develop targets for the future
6. Collect baseline data
7. Sustainability strategies
8. Appropriate action planning
9. Appropriate intervention
10. Develop organizational structure
11. Ensure adequate leadership
12. Monitoring & evaluation
13. Budget

Fig. 10. Type plan of a primary health care unit (dimensions in cm or m)



## Action plan for implementation

1. Seek financial support
2. Gather resources
3. Develop organization plan
4. Establish communication
5. Establish motivation / commitment
6. Identify and overcome obstacles



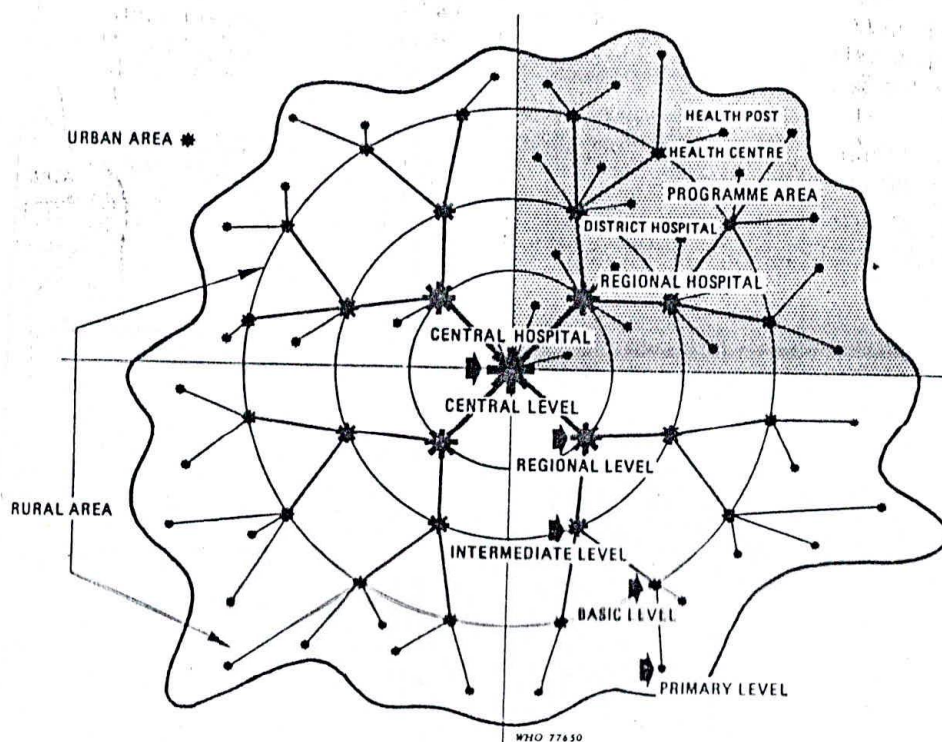
### Data required for basic health planning

1. Total expenditure by government
2. Total expenditure by private sector - voluntary agencies
  - Insurance schemes
  - Occupational health
  - Private practice
3. Break up of expenditure (Govt or private) - Area wise
  - Program wise
  - Age & sex
  - Population wise rural / urban
  - Employment wise- Civil servants
  - Agricultural labourers
  - Subsistence farmers
  - Wage earners
  - Disease wise

### (Primary Health Center) in India

1. Medical care
2. MCH including family planning
3. Safe water supply & basic sanitation
4. Prevention & control of locally endemic diseases
5. Collection & reporting of vital statistics
6. Education about health
7. National health programmes implementation
8. Referral services
9. Training of health workers & assistants
10. Basic laboratory services

Hypothetical example of general pattern of regionalization showing programme area and type of facility





## **Sustainability**

Is the ability of a PHC programme to continue providing services to meet the needs of its target population.

### **Why sustainability**

- ❑ Decreasing funding for development
- ❑ Diversion of reallocate resources
- ❑ Move toward community controlled PHC
- ❑ Need toward increase community awareness in containing health care

1. What to sustain
2. What level is to be sustained
3. What are the resource restrictions

### **Sustainability factors**

A condition that may affect the continued existence of a programme

1. Size of target population
2. Target groups demands for services
3. PHC services quality
4. Management support
5. Organizational capacity
6. Political commitment
7. Personnel
8. Programme revenue
9. Programme expenditure
10. Environment

### **Working plan**

1. Selecting a strategy
2. Make a plan

### **Action plan for sustainability**

1. Develop the future profile
2. Make changes in organizational structure
3. Establish an ongoing evaluation system.
4. Participate in community & research activities



## Practical Considerations in Establishing a health& Development Organization

All theoretical 7 academic considerations will become inconsequential if it is not possible to implement them at the practical level. We have seen that it is possible to use various sectors as entry points to implement a health & development programme. Now this paper turns its attention to the implementation. This paper takes, health care as the entry point to discuss practical aspects of organizing a health & development project.

### Justification

In a developing country some of the most effective & spectacular work can be done in the field of health care. The result obtained will easily conform to the SMART principle of goal setting. The targets can be very specific so much so that they can be expressed in numerical values. For example we can specify the indicators as target IMR = ..... Target MMR =----- Target life expectancy =----- Naturally these targets are measurable. If the goals realistic, it should be attainable & it should not be a big problem to show the results in a time bound manner.

### Sample Objectives for a population 50,000 (10,000 HOUSEHOLDS)

1. To uplift at least 5% of Below Poverty Line families to above poverty line in 3 years
2. To make at least 50% of school dropouts in the age group of 15-25 functionally literate in 3 years.
3. To provide safe drinking water to at least 2000 new households in 3 yrs
4. To bring down IMR to < 80 in 3 yrs
5. To increase immunization coverage to at least 60% in 3 yrs.