



Federal Democratic Republic of Ethiopia

Ministry of Health

Building and Maintaining Healthful House

Extension Package

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1. INTRODUCTION

Housing or healthy home environment is one of the basic necessities of life for physical, social and mental well being of man. Housing or shelter, which does not fulfil the basic requirements, will expose the residents to several health risks.

For example, unhealthy housing or shelter will expose to communicable diseases such as Tuberculosis, to accidents, dampness, cold or excessive heat, noise etc, our housing pattern, specially in rural areas, starting from site selection to construction generally do not meet the minimum requirements which we need from a house e.g. They lack in providing adequate space, ventilation, lighting, separation of domestic animals from human habitation, vectors which transmit disease or nuisance are around or in houses. Hence the house in which we live should be able to satisfy the minimum requirements essential for the health and well being of its residents.

Therefore, the main purpose of this package is to introduce the minimum requirements of a healthful housing to the community through education, creating awareness, demonstration by providing technical assistance so that they would apply when they are constructing, repairing and maintaining their own houses.

2. GENERAL OBJECTIVE

To enable the community to build their own healthful houses and safeguard themselves against health risks which might result from unhealthy living environment.

3. SPECIFIC OBJECTIVES

- 3.1 To enable the community to develop awareness and skill and knowledge on how to build healthful home
- 3.2 To enable the community build and live in houses where domestic animals are separated from human habitation.
- 3.3 To create awareness among the community so that when they build new houses, or renewing old ones they should develop the tradition of using plans, which incorporate the basic healthful housing requirements.
- 3.4 The community be able to select good building materials when they construct houses.
- 3.5 To enable the community to build healthy home environment which is free from diseases carrying insects and rodents.

4. IMPLEMENTATION STRATEGIES

- 4.1 Introduce to the community the general package program
- 4.2 Carry out survey
- 4.3 Draw up work plan which involves community participation
- 4.4 Carry out training activity
- 4.5 Create co-ordination mechanism with governmental non-governmental and community members who are potential supporters of the programme
- 4.6 Involve health workers in the area to support the package activities.
- 4.7 Motivate, educate and organize the community for bringing about behavioural change.
- 4.8 Use local resources
- 4.9 Use demonstration method
- 4.10 Exchange experience

- 4.11 Use motivational methods
- 4.12 Apply local rules and regulations
- 4.13. Carryout monitoring and evaluation work

5. Activities Regarding the building and maintenance of healthful house

5.1. General package programme on how to build and maintain a healthful house.

INTRODUCE:-

- To administrative officials
- To trained or practical health workers of the area
- To well known and influential residents of the area
- To the community, government and non-government organizations etc in the area.

5.2. Collecting information by Incorporating the following:

- Status of the house and its maintenance
- Materials used to construct living house
- Reasons why not able to build a healthful house
- Community's knowledge, attitude practice etc regarding a healthful house

5.3. Drawing up plan of action involving community participation

- Drawing up plan of action based on the preliminary surveying involving full participation of the community.
- Preparing weekly, monthly or yearly work schedule as appropriate

5.4. Conducting training activity

- To the community members such as trained or practical health worker, well known and respected residents of the locality etc.
Who could be potential supporter of the package programme?

5.5. To Civic associations, governmental and non-governmental organizations who could be potential supporters of the package such as:-

- Administration - (to get administrations support);
- Agriculture - (to get the support and training of the agricultural development workers);
- Education - (to give training about a healthful house to the teachers and students)
- Civic associations - (Women, youth etc to establish co-ordination mechanism)

5.6. Involving health workers who work in health institution in the area.

- Get direct technical support from the health professionals where the package programme is conducted.

5.7. Motivate, educates organize and promote the community's participation in order to bring about behaviour;

- At household level give adequate and continuous education about the need of a healthful house and how to construct.
- Give training about the need and how to build a healthful house: in meetings, in Edir and religious places, in public holiday gatherings etc.

5.7.1. Training to be given Regarding the Building and Maintenance of Healthful Living House

Training Topics

Housing is one of the basics needs for man's physical, economic, social and mental well-being, consequently man spends most of his life time in house. As a result the influences of a faulty housing on health cannot be underestimated.

If possible every human being wants to have as much as possible a house which provides complete and convenience service. However, houses are built in rural areas in traditional way with no partition, hence not conducive for living in or working.

However, houses to be built may not necessarily be large or allocated for different services, but even if it is one room, it can be used properly by portioning. But if affordable, it is better to have house for different purposes or services. It is necessary to build kitchen and animal shed or barn separately from human habitation. The following figure shows a well-partitioned model house.

Picture

Advantages of Partitioned House:-

- Convenient for various house hold functions (services)
- Keeps to maintain cleanliness in food cooking and preparation process;
- Sleeping place is separated and is easy to maintain clean
- Safeguards from diseases, which may result by living with animals in an over crowded house.

Services to be provided for in each house

1. Adult sleeping room:- should have bed with mattress, if possible chair, cupboard, baby cradle with mattress etc.
2. Children's sleeping room:- bed with mattress, bookshelf, sitting stool or chair etc.
3. Guest room:- sitting place, chairs, table, cupboard for placing decorations etc.
4. Food preparation: - smokeless stove, cupboard for utensils, water container, container for making tella (local beer) etc. Should contain the above items and be built separate from human habitation.
5. Store house or storage:- should have places for cooked food, flour, item used daily, if possible places for keeping different items, storage place for cereal, if possible modern one etc.
6. Animal shed (barn) feeding place above ground level, pegs for tying different animals etc. and should be separate from human habitation.
7. Washing room:- hand wash basin constructed from locally available material, improved bathtub or shower, and should have drainage connecting waste water from the animal shed.

5.7.1.1. Unhealthy or faulty house exposes the residents to:-

- Cold
- heat
- excessive noise
- lung disease (TB)
- Influenza and other communicable diseases
- Contributes to mental and social disturbance, behaviour change and distrust. Those who are exposed most to such bad situations are low-income segment of the community, children, women, elderly and the disabled ones. According to the criteria set by the World Health Organization (WHO) for a healthy living environment:-

a house should protect the resident from:-

- heat, cold, excessive noise, dust etc,
- Adequate and safe water supply;
- Provision of adequate and sanitary latrine, safe means for solid and liquid waste disposal,
- Should protect against various accident,
- According to the number rooms, should have adequate ventilation and admission of sunshine,
- Should be able to prevent indoor air pollution resulting from fossil fuel smoke,
- Proper food storage place to protect food from exposures to dirt and spoilage,
- Should protect from insects and rodents and should be free from bad odour,
- It is preferable if the residential area is near to social and recreational service places.

In our country, especially in rural areas, the following points should be given emphasis in order to build healthful house, to maintain and protect the residents from accident.

5.7.1.2. Adequate ventilation and admission of sunshine into rooms:

In our country, be it in rural or small towns, houses are built as one room and door with no provision for eating place, food preparation, sleeping place with in domestic animals, with no provision for ventilation and admission of sunshine, and with no adequate outlets (window) for smoke exit.

Where indoor air is polluted by different pollutants, it is obvious that these conditions expose man to health risk.

When indoor air is polluted by fossil fuel it creates favourable condition for microbial and toxic chemical risk for health. In order to avoid these conditions, there should be adequate ventilation and the house should be cleaned regularly.

- build the house with adequate window or air inlets and outlets for proper ventilation, this will make the indoor air fresh and healthy.
- The kitchen or food preparation area should be separate from living house.
- Using properly constructed fuel saving stove with smoke exit.
- Domestic animal shed or barn should be constructed separate from human habitation.

Although the inside space of the house can be determined by the builder's economic status, it is preferable if the room can be partitioned for dining, sleeping and food preparation area.

If it is a one-room house, it is desirable if the floor area is not less than 17 square meters. In general it is better to build a house with no less floor area of 6 square meter except the food preparation area.

For healthy living natural or artificial light is essential for better health and efficient work. As natural light is obtained from the sun, it is essential for physical and mental health and well-being. Therefore, it is necessary to build in such a way to admit sunlight into the house. For this purpose there

should be proper window area to admit adequate sunlight. Trees, which can obstruct sunlight, should be cleared from the immediate surrounding of the house. In addition to its beneficial effect to health, sunlight helps to destroy disease-causing germs in the house. Hence for adequate sunlight admission into the house, the placing of windows are important factors.

5.7.1.3. The Kitchen /Food Preparation Area

The kitchen should be separate from the living house and should be reasonably far from the latrine, solid waste collection point and from the animal shed or barn. It should have adequate air inlets and outlets and should have exit window or outlet for smoke. If the indoor air is polluted it can create condition for emission of toxic substances which can cause a serious health risk, such as eye problem, respiratory tract illness, problem of circulatory system, reduced appetite, risk to fire hazard, skin problem etc. For this reason the kitchen must be free from indoor air pollution. In addition, the kitchen must be kept properly clean, and waste should be collected in proper container and be removed regularly. Before building a kitchen proper site must be selected. After the site has been selected in relation to the living house to be built, then the construction of the kitchen can be constructed with locally available material. Since the anticipated kitchen to be built would be influenced by the local tradition, living pattern, number of household, financial resource etc, a plan compatible to these factors should be prepared. It is known that fossil fuel smoke is hazardous to human health. Taking in to

consideration this fact, a fuel saving smokeless stove need to be constructed.

Improved stove with smoke exit or smokeless for cooking food has the following advantages;

- Prevents eye problem which may be caused by the smoke kept indoor;
- Prevents staining of inside wall and roof by smoke,
- Smoke cannot spoil any material or clothing kept at home thus cleanliness is maintained;
- Improved stove reduces the consumption of fuel wood,
- Similarly helps to prevent fire hazard or accident of children being exposed to burn.

5.7.1.4. Latrine Facility

In order to prevent health risk which may emanate from foul smell of the latrine, the latrine should be sited considering the wind direction, at least 6 meters from the house; lower side of hydraulic gradient, far from water source and food preparation area. If the latrine to be built is a V.I.P.L, the distances can be less. The distance given above services only for dry pit latrine and not for carriage system. In order to keep clean the latrine, there must be waste collection basket or container, broom for cleaning and rug for mopping is appropriate. The waste collection container should be constructed as not to scatter waste around the surrounding, should have proper cover. The latrine should be sealed off before the content reaches 50 cm. top of the latrine.

5.7.1.5. Animal shed or barn

Traditionally, in rural areas of Ethiopia domestic animals are kept in the same house with human beings. This condition can expose human beings to diseases transmissible from animals to human (Zoonotic diseases). Therefore, in order to make living house conducive to health, animal shed (barn) should be separated from living house, and be built at reasonable distance away from the house, water source and food preparation area. The space of the barn should be compatible with the number of animals and the provision of adequate ventilation. The barn to be constructed should be a type which can easily be built from locally available material, should have walls and roof, be graded to avoid accumulation of dropping and urine which can be health risk and also be easily cleanable. In addition it should have air inlets and outlets and for admission of sunlight, door, pegs for tying animals, feeding tank for watering, the tank should be easily cleanable and be kept clean always. The animal droppings be removed at regular interval not to create nuisance around the compound. The animal waste can be buried and composted, and the compost can be used as fertilizer. This will avoid the breeding of flies and other undesirable insects. Using animal waste in such a manner helps to keep clean the compound and its environ. The most important point to consider is that the cows giving milk should be kept separately from other animals in order to minimize disease transmission. In addition the animals be examined by veterinary officers, vaccinated and treated if need arises.

5.7.1.6. Maintaining Cleanliness of the House and its Environ.

- Cleaning the house regularly, cleaning the floor, and if there is a floor carpet expose to sunshine once a week and clean,
- cleaning the walls of the house and painting,
- Sealing off cracks or crevices that may be in the walls or floors for preventing insects and rodents from harbouring in the house,
- Cleaning the internal and external areas of the house so that left over foods and dirt are removed properly,
- The bed should be well above floor level, and beddings and clothing should be exposed to sunshine regularly,
- To maintain the house clean, domestic animals should be avoided from entering into the house,
- Keeping clean and tidy the food preparation and storage area,
- Dispose solid waste by burning or burying,
- Liquid or wastewater should be disposed properly,
- The house should be built on the basis of properly designed plan in order to avoid insects, arachnid, rodents etc. from intruding into the house and its environ and must be cleaned regularly.

5.7.1.7. Prevention of Home Accident

Accidents, which occur commonly in the home, are: Fall, poisoning, insect or snake bite, electrocution, butagas explosion etc.

In order to prevent these and other home accidents the following precaution should be taken:-

- If there is over grown grass or bush around the house, it should be cut and cleaned in order to avoid harbourage of poisonous snakes or other poisonous insects,
- Using properly built above ground level stove for food preparation,
- Care should be taken to keep children from fire area or boiling water;
- In case fire accidents occur sand should be placed at appropriate site in or around the house to put out the fire,
- Insecticides and rodenticides and other similar poisonous chemicals should be kept away from access to children or from food preparation, storage and serving areas,
- Fire arms (pistol, gun) sharps, needles etc. should be kept inaccessible to children,
- Open dug wells, out of use should be kept properly covered and locked up,
- Similarly pit latrines not in use should be kept covered,
- Pit latrines out of use should be sealed off or bailed if possible.

5.7.1.8. Domestic Animals

Cats and dogs, if retained clean, are useful for warning off intruders. In addition they are play pets yet if they are not maintained in proper manner, and left wandering they will cause more harm than benefit. Therefore it is possible to prevent the diseases they transmit or the damage they cause by following points:

- If people play with dogs or other animals, they should wash their hands properly before eating and should not touch these pets while eating,

- Pets should have their own feeding utensils, which should be kept clean,
- Pets should not touch the mouth or the face,
- Pets should not stay or live in the same room with human being,
- Pets, specially dogs and cats should be vaccinated at appropriate time, and should not be left wandering.

Building and Maintenance of Chicken House

Chicken raising is source of income and additional source of increasing production.

Chicken raising is commonly carried out by farmers. However chicken and human beings should not live in the same house, because it will expose to different health risk.

Selecting Proper Site for Chicken Raising

- The site should not be hilly or low, not stony or sandy and not water logged.
- Should not be attached to living house or kitchen
- The chicken house area should be not less than 0.3 square meter. The chicken house can be built on this basis for as many chickens as desired. Chicken house can be built by dividing into two sections one section for day and the other for the night. In addition chicks should have warmer area, the male and female be kept separate similarly egg-laying place be selected. Select also a place where chicken feed and water is easily available suitable site, where the chicken raiser can easily monitored. The chicken house and surrounding should be kept clean in order to avoid

disease, and if there is a sick chicken it should be removed immediately in order to protect the healthy chicken

5.8. Building with Locally Available Material a Healthful House

The following main points are to be taken in to consideration for building a healthful house:-

5.8.1. Site selection

The site to be selected for a building a house should fulfil the following points:

1. Not on the top foot of mountain
2. The area should not be marshy
3. Not exposed to flooding
4. Should not be exposed to natural disaster such as earthquake etc.
5. Should be compact soil with gentle slope
6. The soil should be porous
7. Where adequate and safe water easily available
8. Free from water, air and land chemical pollutants
9. Be place where sunshine is easily available and well aerated
10. If possible should be near where public services, school, market, health facility, electricity etc.
11. In addition the site should be a way from factories, rail way line, dusty road, waste dumping area, from excessive noisy place.

5.8.2. Building a House

In order to build a house, which fulfils the necessary criteria, it is necessary to grasp first the basic principles of building; It is possible to build a modern house on the selected site with affordable locally available material. Since the type of building will be subject to the influence of local living pattern, climate, number of

household, and economic status; it is necessary to prepare a proper plan before hand.

5.8.3. Foundation

1. The digging of the foundation will depend on the nature of the soil of the selected site.
2. If the house is to be built with stone or concrete, the digging should continue until firm ground is reached.
3. If the house is to be built with wood, the foundation should be constructed with stone and lumber be fixed to the foundation.
4. The foundation should be dug in such a way to be able to carry the weight of the wall and roof.

5.8.4. The Wall

1. This can be built from wood, stone, clay, mud, hallow blocket, cement blocket etc;
2. If there are termites or similar pests in the selected site, it is necessary to exterminate the pests by using pesticides, or protect the wall wood by painting termite resistant chemical;
3. The wall lumber which enters into the foundation must be protected from termite by painting discarded oil, or covered with plastic sturdy material;
4. In order to avoid entering place for pests, the inside walls should be plastered to eliminate cracks and crevices.
5. Should have adequate provision for admission of sunlight,
6. The walls should be easily cleanable;
7. The inside wall should be plastered properly with mud and cow dung;
8. The house should be partitioned and separated by wall for sleeping for preparing food and eating.

5.8.5. The Roof

1. It is preferable if the height of the roof is 2.85 meters in low altitudes and 2/60 meter for high altitude area
2. The roof should have proper gutter or gradient to avoid rain water entering to the wall;
3. The roof can be made of locally available material such as grass, wood, bamboo, iron sheet etc.

5.8.6. The Floor

1. The floor should be raised 15 cm. from the surrounding level;
2. Should be made in such a way to avoid cracks and crevices which might harbour pests and worms;
3. The floor should be compacted properly and plastered with mud and cow dung.

5.8.7. The Door

1. The door of living house should enable the occupants to get out easily during if accident happens;
2. For living house it is preferable to install two doors for escaping in case accident happens;
3. The main door should have width of one meter and height of 2.10 meters.
4. The two doors should not be built opposite to each other in order to avoid flow of current of air, which may be hazardous to health;
5. The door of living house should be strong and inaccessible to insects and mosquito.

5.8.8. The Window

1. A living house should be able to admit natural light air freely;
2. It is preferable if the window dimension be width 120 - 180 Cm. and the height 120 Cm.
3. In any room at least there must be a window;
4. The window of living house be built strong and should not permit entry of mosquitoes and other insects.

5.8.9. Remodelling and Improving Existing Houses

Houses which haven been built earlier may not fulfil the basic health requirements, remodelling plan be prepared to improve the existing houses. The community can have a better realization if demonstration is used to convince them to Improve existing houses to incorporate the health principles. Therefore, it is possible to build the existing house taking into consideration the above-described points.

Building Kitchen or Food Preparation Unit

1. Should be built in near distance from living and dining room and far from latrine facility;
2. Must be at least at a distance of 6 meters from solid waste storage and barn;
3. It is preferable if it is attached to the store, which should be a minimum four square metres;
4. In order to permit proper ventilation and sunlight, it is preferable to install window in east and south direction;
5. Should be built in such a way to avoid fire accident;
6. If the food preparation unit contain wood, fuel gas electric stove, cupboard for placing utensils, utensil washing facility and exit for smoke, the place will be

convenient for health of the kitchen workers and suitable for processing clean food.

Figure Stove with Smoke exit

The Smokeless Stove (Stove with Smoke Exit)

- For better visibility when preparing food, the stove be sited in a well lighted place or near window;
- The dimension of the stove must be 2 meters wide and 1meter height. This dimension is for a medium stove, the width and length can be increased as desired;
- On the basis of the given dimension, dig the foundation few centimetres away from the wall of the house;
- Leave the front part for storing wood and other items;
- As shown in the picture, the mud brick should be plastered with mud on three sides of the wall;
- If the stove to be built is higher than 80 cm. (about 4 "Sinzer") lumber can be cut according to the size and can be placed and plaster the mud brick with mud;
- In the front leave two holes for fuelling the fire wood;

- Build the height up word to fit the size of cooking pot;
- Connect the smoke exit holes internally on one side only;
- Build properly the smoke exit hole and connect with the wall in order to carry the smoke to the outside;
- After 40 cm. (about 2 "Sinzer") height, leave open the cooking pot holes, cover the brick from above and plaster (connect);
- Plaster with mud the whole area to leave no hole;
- On the sides or near leave space for putting dough container and other;
- After drying properly the place can be used for other services.

NOTE:-

- Fire should not be started before the stove is properly dried;
- While the stove is being built, three holes must be connected internally with the smoke exit;
- The hole size in the stove vary with the type of food preparing utensils for e.g. for injera baking, for pan, pot, coffee pot etc.;
- When the smoke exit passes through the wall, the walls may be heated. To avoid this the surrounding wall should be plastered with brick soil. Heat should be reduced as much as possible not kindle the wall. Before building the stove, the bricks must be prepared.

The figure shows the dimension in cm.

For constructing mold for the mud brick, only wood /lumber and nails are required

How To Build

- The soil (earth) and the "Chid" (residue of Teff after removing the cereal) must be blended properly, mixed and should be left for three days to mature;
- Should be compacted after some more "Chid" be added;
- The mixture should be compact to give it form;
- The wood (lumber for molding should be cut at right size;
- Adjust until the mixture is just above the mold;
- If it is less than the mold size should filled with more matured mixture;
- Keep the cut clay now to dry well;
- This now can be used for different purposes as desired.

5.8.11. How to Build Latrine Facility

- Build (dig) in a site where the wind direction air circulation conducive.
- It should be sited at least 6 meters from living house;
- On the lower grad exit of water source;
- Should be far from food preparation area;
- The latrine should have cover;

Equipment for Maintaining Cleanliness of the Improved House

A house always needs cleaning when cleaning dirty house or cleaning the environment the broom or cleaning instrument should be convenient for the work.

Cleaning with inappropriate and awkward instrument results in:

- Waste time and energy,
- Spoils body posture,
- May bring back pain.

Figures showing the inappropriate way and appropriate way of cleaning

As shown in the pictures (above), sweeping with short broom in bending position indicates how tiresome the work is, and injurious to the body. The second picture indicates that cleaning is performed without bending the body and without getting tired. As observed in picture 2, cleaning can be performed in place above ones height without being tired. If cleaning is done with short broom, one cannot reach above one's height, hence has to stand on a stool or try to reach the hard way.

The result is:-

- Wastes time
- Wastes energy
- May cause injury by falling

Items Needed for Making Long Broom:-

Thin lumber one and a half meter in length, hard straw, palm leaves, string or thin wire, axe or big knife

picture

How to Make

- The thick proper straw or palm leaves should be immerse in water to minimize breakage;
- Straighten out the straw blade and the palm leaves properly;
- Insert the broom handle into the straw blade or palm leaves;
- Tie up the straw blade on the palm leaves with broom handle, tie in three to five row firmly;
- Straighten out the end and trim with an axe or knife.

5.8.12. How to Build Barn or Animal Shed

1. Animal shed must be built separate from human habitation, far from water source and food preparation area;
2. The shed must be compatible with the number of domestic animals and conditions of ventilation;
3. The barn must be a type which can be made easily from locally available material, should have wall and roof, and the floor should be of proper quality;

4. It should be able to admit sunlight and window for adequate air circulation. Must have pegs for tying animals, feeding and watering tank. The tank ("Genda") should be easily cleanable.

5.9. Using Demonstration Method

- In a convenient location, where the community member can easily see and understand, build a model demonstration healthful house. Invite volunteer households and demonstrate to them with a view of enabling them to build their own healthful house.
- At household level enable the members to build together a model healthful house, accordingly enable the neighbouring community can replicate the model house and put into use.

5.10 Exchange of Experience

Enable households to visit, observe and exchange experience with those households who had built and use healthful house as good example.

For the Extension Package Worker

Those extension package workers who had achieved success in implementing the healthful housing package should be visited by other extension package workers to exchange experience and practice.

At Kebele Level

Those kebeles who have performed exemplary work in implementing the package programme should be visited by other kebeles to share experience.

5.11. Use of Motivational Methods

- Giving incentives to those households who have shown good participation and action towards the implementation of the package;
- Giving certificate of recognition;
- Giving locally available tools as award;
- Citing as exemplary in public gatherings

5.12. Applying local rules and regulations.

Apply local rules in co-ordination with government policies and regulations

Drawing up work guidelines by involving the community members

Applying government policies and guidelines

5.13. Monitoring and Evaluation

- Monitor the action plan and scheduled activities on a monthly or yearly basis as appropriate.
- Communicate to the community the achievements or failures of the planned activities.

6. Expected results (outcome)

- 6.1. People will construct and use a healthful home and as the result avoids illness which might arise from unhealthy house.
- 6.2. People will develop skills of building a healthful house.
- 6.3. The implementers of the package programs will have skills of building and maintaining a healthful housing.
- 6.4. More community members who support the package program will be created.
- 6.5. Tradition of co-ordinated work pattern will be developed.
- 6.6. Knowledge and skill of building healthful housing will be promoted.

- 6.7. People to people experience sharing will be developed and their contribution will be increased.
- 6.8. People will develop the tradition of building houses partitioned for various functions.

7. Problems which may be encountered in implementing the package programme and their solutions

7.1. Problems which may be encountered

- Influence of culture and prevailing tradition
- Shortage or lack of building materials
- Low level of people's standard of living
- Low level of participation and change of behaviour
- Existing houses built without fulfilling the minimum hygienic requirements.
- Inadequate support from those who are directly or indirectly related to the implementation of the package program

7.2. POSSIBLE SOLUTIONS

- Giving continuous and varied education
- Using easily valuable local materials
- Doing every thing Possible to improve the living standard of the community
- Improving the existing houses on the basis of minimum hygienic requirements
- Motivating and educating continuously those people who could be key supporters of the package programme.
- Health institutions and health workers should follow up the activities and assist in providing solutions

8. SHORT METHODS OF COMMUNICATION

8.1. Places for communicating messages: -

- House to house visit
- At village level
- In schools
- In Health institutions
- In places of worship (church and mosque)
- At social meeting places (Edir etc)
- At market places
- At development offices

8.2. WAYS OF COMMUNICATING MESSAGES

- People to people (Discussing)
- Calling meetings (large one)
- Group meetings
- Using demonstration method.
- In the form of drama, songs, poem reading, telling story
- Exhibition
- Presenting short programmes on public holidays
- Using tape recorder
- Using posters, pamphlets and brochures
- Using mass media such as newspapers, radio and Television.
- Using mobile health education delivery equipment.

8.3 MESSAGES TO BE COMMUNICATED

Will be accomplished based on the detailed package programme activities.

9. MONITORING AND EVALUATION

9.1 MONITORING

- Number of people given education on healthful housing requirements: male and female total
- Number of meetings conducted on healthful Housing constructed and used
- Educational material used for promotion of healthful house and maintenance
- Number of households who have separate places for domestic animals.
- Presence of separate kitchen or food preparation places
- Availability of adequate air inlets or windows for ventilation and lighting
- Availability of front and back door
- Freedom of the compound from insects and rodents etc,
- Cleanliness of the floor, walls and roofs of the house.
- Freedom of the house and kitchen from insects and rodents
- Has the house adequate rooms e.g. living place, sleeping and storage place and adequacy of space in each
- Whether new houses are constructed according to the hygienic requirements of the package program.
- Number of houses built on the basis of the above requirements
- Are there separate and clean places for domestic animals e.g. dog, chicken etc. Availability of smokeless stove

9.2 EVALUATION

- General objective of the package program
- Plan of action prepared to implement the package program
- Resources used for implementing the package programme.
- Human resources (number and type of profession)
- Materials (locally available and donations)
- Amount of money (from the people and assistance).

Implementation strategies

- Field trips
- By collecting and analysing reports
- By discussing with beneficiaries

ACHIEVED ACTIVITIES

- Indicators used for coverage (percent, No, ratio)
- Strong points scored;
- Weak points identified
- Positive change brought about on the community
- Problems encountered
- Suggestions given to solve the problems.

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