# MAPPING SELF SUPPORT THROUGH THE UTILIZATION OF INFORMATION TECHNOLOGY IN COMMUNITY-BASED SETTLEMENTS

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## ABSTRACT

Mapping self-subsistent is method collection information about potentials and problems of the residential environment in a participatory way through the process of focus group discussions, tracing field conditions, and digital data mapping. Objective from activity This is give information base about opportunities and problems environment settlement through participation society. Another goal of study This For understand the empowerment process through non-formal education in carry out activity utilization technology information on settlements based society. Mapping done through three stage that is preparation, data review and formulation . Based on results implementation activity society, compiled a number of map thematic opportunities and problems in field economics, cultivation , network roads , management trash , drainage and sanitation . Mapping through mapping self has two roles main , as a participatory process and as product the community created . Mapping through mapping independent has two roles main , as a participatory process and as the resulting product society .

**Keywords :** Mapping  self-help; Community Problems; Community Potential.

## INTRODUCTION

Mapping self-subsistent is one activity most important in the National Community Empowerment Program (PNPM) and its derivative programs like Management Program Environment Settlement based Society (PLPBK) (2008-2014),). Average program going on six month until One year. kindly general , the program scenario requires presence group affiliated community in institution formation public or team recognized by the board of directors complaint area , like Community Self-Reliance Agency (CSA), Planning Core Team Participatory (TIPP), Group Work ( Pokja ) and others. Group public this is what plays a role as a driving force activity mapping self help . Through mapping self help, public role as key player, deliver information condition base environment settlement , Good physique nor non- physical . Information the used as base For activity planning environment or management environment Which objective mainly is For increase quality settlements. Participation public in enhancement quality report reflect implementation planning participatory. Planning participatory understood as effort together public in solve problem For reach desired condition through cooperation various group interests (Bihamding , 2019). In one study, Planning participatory Possible can increase Skills management, knowledge and skills in something organization ( Mustanir et al., 2019). Mapping independent is one _ activity most important in planning participative , remember role map as

reference spatial . As alternative For fulfil need information spatial (Handayani And Cahyono , 2014), self-help mapping consists from three issue base , ie . collection information , research information and formulation problem . data collection problem physical , social , economic and cultural environment settlement going on stage beginning activities and continue with data collection . Data review is the process of analyzing in a manner critical data and facts obtained . _ Obtained information _ during analysis critical grouped and formalized . The whole process is done by the community , though public often assisted by program teachers , Facilitators / expert in the program area . Participation active public is Wrong One form participation especially in taking decision and execution project /program development (McTaggart, 1991) Participation active public in study self-subsistent possible public For more understand potential and problems environment settlement . from corner view they alone , No from corner view " outsiders ". Besides it , society own chance For obtain information and knowledge new related with management environment built opportunities and problems environment built . Information the can form table , description or map thematic . kindly No direct through survey self-subsistent public through stages Study understand and realize condition environment place stay , with hope will appear concern and awareness For create environment quality life . _ Environment quality life _ show level Power capacity environment the actual , which consists of two elements main , that is condition House as place residence and conditions environment home (Otto, 2004).

## METHOD

Activity mapping independent shared become three activity main that is pre implementation consisting from formation team , prep technical activities and preparations materials /data mapping . Step furthermore is implementation as the core of data review , research field and data collection . Activity mapping Self-subsistent This will done in the Village Bintana Subdistrict Atinggola North Gorontalo Regency in 2023. Generally mapping self-subsistent done with map problem physical , social , economic and cultural environment settlement to in sketch / map ( no scale ) environment .

At stage This formed team mapping self- help consisting from volunteer society , device village and facilitators / experts who should role active in activity the . Next step in phase This is preparation technical and material activity . In phase This facilitator / expert in matter This team devotion make base mapping self-help for society can do action active . Participation rate public determined by how much big they feel motivation of a coherent process ( consciousness , will goals , interests , consideration strengths and weaknesses , participation and participation active (Hart, 2008)) understand self-help mapping basics, expected participation they in an upgrade program quality settlement the more increase .

Preparation technical evaluation self covers setup tools and materials at the time discussion , determination time and schedule implementation activities , as well distribution task each coordinator group based on evaluation pre implementation team , drafting activity technical and drafting material / data mapping , data analysis , mapping field and step data preparation This needed For evaluate results activities carried out .

A number of generated material among others map basic , secondary data House No worthy inhabit, distribute poor people, ownership MCK and other related information quality environment live . Material the prepared especially first by experts planning , government village and planning core groups participatory .

Self-help mapping activities using three stages namely data review, mapping field and data compilation . Data research was conducted with discussion group directed by one devotion society . Discussion group directed is something method collection information through discussion group and/ or interview For empower society ( Indrizal , 2014).

Discussion opportunities and problems as well as the mapping with sketch Before do survey material , public get information base about mapping self-subsistent and explanation detail about mapping self-subsistent from team devotion society . With using Google Earth, team community and devotion public will monitor condition environment settlement and determine RT/RW boundaries . Because Not yet There is map base digital for location area this , map Google Earth imagery will taken later and used as map basic .

In discussion the , public shared become a number of group based on aspect settlements . environment ; facilities , infrastructure , conditions buildings , conditions environment , aspect social and cultural . Every group discuss all aspect it and define their problem face and map it in outline simple . About results discussion , respectively group present results the discussion on the forum, where map potential and problems mapped confirmed by the public participating in discussed and agreed together as results study .

Presentation map problems and agreements results Results discussion agreement mapping problem used as material reference For studies target field For verify results discussion with condition real . Mapping team self-subsistent each group supervised by the team devotion society . During studies field , public more know problems that exist in environment settlement . Besides that , for team devotion to community , activities study field is chance For learn phenomenon related _ with quality environment life and participation public on the spot operation .

Besides fact that survey field This aim For document problem environment settlements , by No direct also inform to public about method mapping problem environment . During survey environment observed circumstances network road , channel disposal , water waste , network channel disposal , area green , room open public , conditions facility environment and condition life society .

Stage data collection is stage the resulting data collection from discussion group direction and results survey field . Data compilation is the process of collecting data automatically sequentially and arrange them in the database ( Martono et al., 2010). Classified data according to type and subject and drawn repeat use device soft AutoCad and Corel Draw, and maps with subject particular ( map thematic ) prepared in accordance with identified problem .

A number of the resulting map type spread House No worthy inhabit , map problem network roads , drainage , garbage , etc. . Need two weeks time For make map thematic For all potential and problems environment . After compile map thematic possibility settlements and problems environment , result mapping self-subsistent will socialized , in particular for resident area customs . Socialization results mapping self-subsistent managed by a team Work non-profit , which includes implementation main group mapping self-subsistent and where government city and society wide participate . Mapping team self-subsistent as representative public present results mapping problem done in accordance with spread topic and area. There is three mark base in activity social , which process somebody Study to prevailing values and norms in society .

Evaluation needed For evaluate implementation implemented steps . Evaluation is a related process with achievement objective and evaluation to achievements that have established (Muryadi , 2017). Evaluation activity done to the mapping process self-help and results mapping self-subsistent through discussion interactive and use milestones activity And expected result .

## DISCUSSION

For twenty year Lastly , the term " participation " has used in a manner wide in debate development and refers to participation in the social arena , " community " ( Gaventa and Valderrama, 1999). Participant survey self-subsistent as part from public custom , which is considered capable represent whole public For convey idea and his wishes about quality environment live . When every process is considered in stage pre-implementation,

a number of variable suitable with method evaluation rural participatory . Objective method This is push public For role active in increase information and analyze condition public That alone , as well as develop plans and actions based on matter (Chambers, 1992; Nasriati et al., 2017).

Besides That self-subsistent This happen through a number of activity moment before implementation activity mapping. Participant activity mapping self-subsistent will get information related method mapping and information base about planning participatory. Besides that, public more understand environment his life through discussion group .

## Result and Discussion

## Mapping Potentials and Problems of Environmental Drainage, Sanitation and Solid Waste Management

Although channel drainage Already built in almost all territories, however Still many broken , heaps Trash and drains are broken in a lot place . Management system garbage Still done in a manner traditional that is with collect and burn in the yard house . Besides that , Lots throwaway residents _ trash in the yard house , yard empty , and bank river . Condition the trigger disease , annoying Genre water, and raises settlement slum . Affirmed that rubbish considered bother infrastructure rural and vulnerable to health and the environment (Indah et al., 2021). Study This is one effort beginning For obtain information base about problem trash , because area settlement rural accounts for 60-70% of the total generation rubbish ( Kustah , 2005). kindly general can said that condition sanitation environment settlement not enough ok . Remember Still lots of toilets wild . No all inhabitant own toilet in his house Because limitations cost development . However some public toilets has built in several place inside area rural For fulfil need society , though part inhabitant No Want to use it Because Not yet get used to .

## Mapping the Potential and Problems of the Road Network in Residential Environments

Moment map opportunities and problems network road , public do observation field , observe type pavement , level damage and condition in around network road . Condition Rural roads have road ecology and asphalt as well as rocks . kindly general , condition road main village need improvements in some point . Besides it , there is a number of segment road in some vulnerable area flooded and damaged . Temporary that , road connecting path House with road main part big Already paved .

Opportunity and Problem Map Road Based Network results mapping , public can map condition network road based on type pavement that is based on asphalt and roads closed . on the contrary , road ground / surface land almost No is inside area countryside , and system road as one infrastructure environment role important in support accessibility area . For That needed optimization and control maintenance road as one infrastructure base environment housing area in utilization and management room in cooperation between government and society.

## Mapping Potential and Problems of Land Use

Most area rural dominated by settlements , villages and fields, the situation of the area affected by the ups and downs flood consequence river overflows , several land agriculture and land dry waterlogged and can utilized . Condition land moment This No unproductive and neglected by the owner . Based on results community identification , although robbery is threat alone , still There is land possible agriculture done back . Besides that is , quality reserved land For settlement can improved For realize decent settlement free slums , for one

utilization room green on land free . Besides it , in part willing community For utilise his yard For planted plant productive as form utilization room open And effort in a manner No direct increase quality settlement . Problems identified by public including flooding land agriculture , fields and fields owned by inhabitant so that No can planted and land become No productive . Part big resident No use land with on purpose Because expensive cost management land . Besides that's a problem billing is irregularity . With thus , the process of design and construction solely based on skill and creativity owner house . So that determination direction building And distance between building often ignored by society .

In activity mapping self-subsistent this , prepared One map base and four map thematic (opportunities and problems economy local , cultivation , drainage environment , network way ). Map can used by society as information base in plan enhancement quality settlements, remember enhancement quality settlement especially focused on conditions physique settlements. kindly general, time is one limiting thing activity self-help mapping. Although Already arranged plan action For every stages, however activities to be done often No in accordance with time that has agreed. this done as consequence remember activity This involve Lots personnel. Condition This No change characteristic activities, community still committed full for carry out activity mapping self-subsistent as activity core of the management program environment settlements.

Evaluation activity done in a manner parallel in a manner schematic on every stages implementation activity. At stage precommissioning, evaluation done after preparation technique and preparation material. When you do activity evaluation after review data and finalize survey field. On evaluation pre implementation, evaluation data research, and evaluation study field, group devotion public do mapping self-help in society. Evaluation done in group discussion small for facilitate the evaluation process. After that, results evaluation each group will presented on the forums. The same thing is done in the evaluation material learning and evaluation studies field. It 's just different in second ranking. Evaluation end activity focused on study results activity, that is map created thematic together with society.

Results from every stages evaluation performance, start from evaluation pre implementation, evaluation data analysis, evaluation study field and evaluation performance. when we face to face with results evaluation, us limited to the mapping process self-subsistent until objective achievement end, based on exists limit time implementation service public.

**CONCLUSION**

Mapping self-subsistent is a necessary process participation active public recipient benefit through activity discussion group directed in a manner periodically . Activity This in a manner No direct practice public For active discuss and convey his opinion For map potential and problems environment , with objective end give information base For increase quality settlements . Activity This increase ability public in identify opportunities and problems in environment settlement as well as classify opportunities and problems the to in topics certain . this reflected from results mapping self form map resulting thematic through a systematic process of identification , analysis , design and mapping . Something activity service public can said succeed If objective main from activity the reached . Activity service public to front can done in a manner participatory with do mapping House No worthy live . Topic This rated Enough important from corner view topic main , increase quality settlement based society .

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