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SOCIO-ECONOMIC MONITORING

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AUDIENCE: CONSERVATION FIELD AGENTS

INDIAN OCEAN COMMUNITY CONSERVATION HANDBOOKS

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Introduction to socio-economic monitoring

Socio-economic monitoring, or SOCMON is a scientific method of measuring changes in people's knowledge, attitudes, perceptions, and material well-being. It is a useful tool for helping to understand, in general terms, how people's lives are changing over time, especially with respect to certain factors such as development, conservation and education interventions, and changes in abundance of natural resources.

SOCMON survey results can also be useful for helping communities and their partners to understand problems experienced by communities and to provide information that will be useful in finding solutions.

Information collected from SOCMON studies is therefore very important to the long-term success of natural resource management efforts. Information collected is used to help determine what problems are occurring in the area and what potential solutions might be available.

Additionally, SOCMON is a critical tool for evaluating the progress of projects to ensure that benefits are reaching the community. Failure to carry out SOCMON studies can result in wasted efforts and discouragement as unsuccessful or problematic projects may be continued rather than re-evaluated and changed.

This handbook is designed to help community organisations and NGOs to train community socio-economic surveyors. It is assumed that survey design will be carried out by a trained technician, and so is not covered here in depth. Instead this handbook should serve as a reference for surveyors giving them introductory knowledge of the components of social surveying with some discussion of common problems and their solutions.

Components of socio-economic monitoring

There are five main steps to carrying out a SOCMON study. Each will be discussed briefly below.

- Survey design
- Data collection
- Data entry
- Data analysis
- Presentation of results

Survey design

Survey design is the most important step in the study.

A poorly designed study will not yield any useful information resulting in wasted time, money, and community trust. Surveys should be designed with the assistance of trained SOCMON technicians who can be found at local universities or through scientific associations such as the Western Indian Ocean Marine Science Association (WIOMSA, www.wiomsa.org).

Technicians should assist in the determination of the sample size, questionnaire design, and the creation of a database to hold the data that is collected.

Survey objectives, should be determined by the community and the organisation carrying out the survey. Surveys should be based on a few specific objectives. A few example survey objectives are listed below.

- To understand community attitudes to community law enforcement and barriers preventing successful application of the law
- To measure the impact of community algae aquaculture projects on household income in the region
- To measure the population growth rate in the local region (e.g. at commune or district level) and factors contributing to observed differences

Very broad surveys which seek to gather information from a community about a number of different topics are not acceptable. These surveys generally produce information that would be more easily gathered by simply talking to a few key members of the community.

Once the overall objective of the study is determined, specific information to be collected should be identified (the 'variables'). This information might include things such as:

- Attitudes towards marine reserves
- Knowledge of local laws
- Perceptions of changes in resource abundance
- Changes in targeted species over the year
- Village infrastructure

Surveys should focus on the groups most knowledgeable about the subject under study. For example if the objective of the study is to measure the prevalence of contraceptive use among women 15 - 40 years old, then the survey should only select people within that grouping. If the study is about the fisheries catch gained from beach seiners then non-beach seiners shouldn't be included. However, if the study is about the attitudes and perceptions of the community about beach seining then the sample should be drawn from the entire community. It is important to decide exactly who will participate in the survey before going any further. One needs to know the size of the population to be surveyed in order to choose the right survey methodology.

Data collection (surveying)

Methods of data collection include key informant interviews, focus groups, household interviews, and individual interviews. The Appendix summarises these collection methods and lists the benefits and disadvantages of these methods. The following section will briefly describe how to carry out the different data collection methods.

Data collection can be done by university students, NGO or government staff, or local community members. Community members have the advantage of knowing the local

dialect and culture and generally have an easier time gaining interviewee trust. On the other hand, some community members may be reluctant to share personal information with local surveyors. When surveys are designed with strong community input and participation, community surveyors give communities more of a sense of ownership of the survey, improving reliability and reducing survey fatigue (see 'Survey fatigue' section).

An important note is that before carrying out any of these methods, the community should be notified about the purpose of the study and asked for input. In some countries, surveys must be authorised by government officials. In all cases, community leaders should be consulted before surveying begins. Also, it is important to inform people that their participation in the survey is voluntary by using an "opening statement," which is delivered to each respondent prior to beginning the interview. In this statement, the objectives of the survey should be explained, the approximate length of the survey should be communicated and the choice to participate should be presented. (Note: respondents should be able to opt out [decline to participate] of the entire survey as well as any particular questions).

Key informant interviews

Key informant interviews (KI) are best for collecting expert knowledge and general background information. Community leaders, scientists, and other specialists are targeted for informal discussions where specific topics are covered. A list of questions and discussion topics should be developed beforehand to frame the discussions and many follow-up questions should be asked. Any conflicting information from different sources should be addressed in follow-up interviews or focus groups. Quantifiable data about the knowledge, perceptions, or attitudes of community members should not be sought in these interviews, rather this will need to be collected using household or individual surveys.

Household and individual interviews

Household and individual interviews are grouped together because of their similarity. The major difference being that household interviews seek information about an entire household (defined as a group of people who share meals together) and are generally conducted in the presence of two or more household members, while individual interviews include only one person at a time.

Household surveys are carried out by visiting a random sample of houses in a village or area according to a pre-determined survey plan (survey planning is not covered in this handbook but information can be obtained online or from social scientists at a local university). These selected houses are visited by a surveyor who asks them a series of questions from a questionnaire form.

Individual surveys are carried out by choosing people in public places, at random to participate in the survey or by visiting houses according to a survey plan and interviewing one person in the household.

Surveyors need to work very hard to maintain a positive attitude with interviewees in order to keep their attention during the survey. While striving not to lead people to any one particular answer, surveyors need to help interviewees clarify their answers so that they provide valuable information.

For example, if a survey question is: "What changes have you seen in the crab fishery over the last five years?" And the response is, "Well I'm not too sure, because the weather changes every day. Some days are really great, some days are bad." The surveyor should ask a clarifying question, "OK, but in general, over the last five years has there been any change that you've seen?" This should prompt the person to say something like, "Well, I'd say that there are fewer good days now. So I think the fishery is getting smaller."

The surveyor must be very careful however, not to lead the interviewee to an answer by saying something like, "OK, so the fishery hasn't changed much?" Because the interviewee is likely to simply agree, "Yes, it hasn't changed much." If this happened repeatedly over the course of the survey, then a surveyor might change the results of the entire survey to say that many people think the fishery has not changed. This would not be true however, because many people only said this because the surveyor suggested it. This wrong information might lead the surveying organisation to ignore the crab fishery in future conservation efforts because they believe that the catch is not declining very quickly.

Alternatively, they might spend a lot of money measuring the catch to determine if it truly is declining when all the fishers already know that the fishery is in decline. In this way, wrong survey results can lead to a lot of wasted time and money.

Focus groups

Focus groups are meetings of four to ten people, including one surveyor, where a number of questions are asked. Questionnaires are not usually used, instead a list of questions and topics to be discussed is prepared in advance, and used for multiple groups. Since quantitative data is not gathered in focus groups, it is less important that all questions are asked in the same way. Instead focus groups are useful for gathering background information, understanding complicated problems and for testing how the community might react to new ideas. Focus groups should not be used to make decisions about community resources, as they are not formal meetings. Additionally, one focus group is generally not representative of the ideas of the entire group as a small number of influential individuals can greatly influence the results. For representative results, it is best to hold several focus groups with different people.

Leading focus groups is done by engaging participants in an interesting discussion about the desired topic. This can be done using questions, pictures, or even short movie clips. The surveyor should prompt the group with lots of follow-up questions and include

everyone in the discussion. Quiet participants should be specifically asked for their thoughts throughout the discussion. Differences in opinion should be encouraged when they allow for greater reflection and discussion, but should not be allowed to be expressed in an aggressive or demeaning way. Each focus group should begin with a set of ground rules set by the surveyor to ensure a safe, positive, and effective space for discussion.

Data entry

Once some data has been gathered from the field, it needs to be entered into computers for later analysis. Data entry systems differ according to the software used for analysis, so detailed instructions can not be given here. Individual organisations will need to train their staff in data entry depending on their particular circumstances.

It is important to note that data entry should be carried out simultaneously with data collection so that preliminary analysis of the data can be done as soon as possible. It is much easier to correct problems in the early stages of surveying than after the survey is finished. For example, a particular question may result in similar respondents giving very different answers. This could reflect real differences in opinions among community members, but could also indicate that a question is unclear to respondents.

Data analysis

All survey questionnaires need to have two main components. The first is information about the person or household that is answering the questionnaire. This information includes their age(s), education level, ethnicity, profession, and other information that can be used to classify individuals into groups (for example gear type used for fishers or hunters). Secondly, questionnaires should include questions regarding your specific survey objectives. The first group of variables mentioned above are called independent variables and the second set are called dependent variables. Independent variables will change little over time while dependent variables are the things that you really want to measure and may change greatly over time. Simple data analysis will organise the dependent variables according to different independent variables in order to produce new information. For example, attitudes about marine reserves (dependent) will be analysed by gender to see if men and women have similar or different ideas about marine reserves. Another example would be income level (dependent variable) organised by family size to see if larger families are richer or poorer than smaller families.

Presentation of results

In many ways, presenting the results of the survey to the community is the most important step in the entire SOCMON process, and one that is often forgotten or ignored. Presentations should reward community participation in the survey with interesting, meaningful results that can be used for decision making by the community.

Presentations should be understandable and relevant and should involve the community through question and answers sessions and discussion. If more information is needed from the community (e.g. a follow-up survey), then the communities permission should be sought.

Presentations are also a great opportunity to verify the results of the survey and get clarification on any confusing or conflicting results. If a follow-up study is to be conducted, then the community should be consulted on what questions should be included, excluded, or modified.

Many surveys do not take the time to present the results back to the community which leads to frustration and suspicion about the purpose of the surveys. If budgetary constraints do not allow for presentations, then the survey should be scaled back so that presentations can be included. In other words, presentations are not option, but a necessary part of the socio-economic survey process.

Common problems and solutions

Socio-economic monitoring requires financial and human resources, technical knowledge and dedication. It also requires a willingness on the part of community members to participate in the study. Bringing together the necessary resources to carry out the survey and securing the participation of the community can be a challenge.
A few common problems are discussed below which grow out of this logistical and leadership challenge.

Survey fatigue

Surveying can be most challenging in areas often visited by surveyors from different organisations. Especially when some organisations fail to present the results of their surveys to communities, community frustration can grow to the point where people are reluctant to participate in surveys. Survey fatigue is the term, which describes community frustration with over-surveying or improper surveying. Survey fatigue can be minimised by communicating effectively with the community and community leaders before beginning the survey. The radio can be used to notify large communities about the survey especially to alleviate any fears people may have about strangers going door-to-door. One must be careful not to bias survey results with false promises about the outcome of results. Survey objectives should be clearly specified and participation should be requested, not demanded. The surveyor should commit to doing a presentation of results and give a date for this presentation if possible.

If community members are still reluctant to participate then survey design should be reconsidered to minimise household and individual surveys. Instead focus groups, and key informant interviews should be used as it is easier to secure participation. Paying community members for their participation in household and individual

surveys is not appropriate and not a viable option for avoiding survey fatigue. Paying community members biases survey results and participation by encouraging people to answer questions in the way they believe the surveyor wants them to be answered. Importantly, paying participants makes it much harder for other organisations to survey without also paying. Many community organisations can't afford to pay participants so this may prevent them from carrying out surveys in the future.

Uncooperative respondent

Some survey participants, while agreeing to take part in the survey will give false responses or incomplete answers. Often the best way to deal with this is to address the problem in a friendly but direct way, "You seem a little frustrated with the survey, is there something wrong?" If the situation doesn't change then the surveyor should proceed quickly and politely with the survey but write VOID across the top of the page after leaving the interview to ensure that the respondent's answers are not used in the analysis. If large numbers of people are uncooperative then survey fatigue may be the cause, or failure to properly notify and consult with the community and its leaders before beginning the survey. In other cases, respondents may simply be reacting to a problem with the surveyor such as inappropriate dress, or a poorly written or delivered opening statement. The questions in the survey might also cause respondents to become uncooperative if they are perceived to be too personal or culturally insensitive.

A small number of uncooperative respondents is normal, but if more than 2-3% of respondents are uncooperative, then the entire survey may be biased. Large numbers of uncooperative respondents may indicate a problem with survey design or the survey team. Often with a little polite, friendly inquiry one can determine the cause of respondents' frustration. If the problem lies with surveyors than more training needs to be given, while problems with the questionnaire should be addressed with focus groups and community consultation.

Conflicting responses

Often survey results are difficult to interpret. For example, you might find that half report that marine resources are declining while half report that they are increasing. There are several possible interpretations of this data. Perhaps some resources are going up and some are going down and different people rely on different resources. If this is the case then similar groups of people (for example 80% of female fishers report declining resources while 70% of mangrove crab fishers report increasing resources) should have similar responses. If similar groups of people do not have similar responses then one should be careful when presenting the results as this may indicate a problem with the question. For example, in one survey 50% of sea turtle collectors reported that catch was decreasing, while 50% said it was increasing.

Through a focus group it was found that those who thought it was decreasing thought so because it was getting harder to find turtles, however those who thought it was increasing thought that catch was increasing because of new fishing gears which made it easier to catch turtles. Both groups agreed that turtles were becoming less abundant, they only disagreed on the trend of the numbers being caught.

Many times, conflicting results can not be fully answered through data analysis. In these cases, focus groups and presentations should be used to clarify results. Follow-up surveys can be used to confirm ideas given at focus groups.

Conclusion

Too often organisations waste time and money communicating knowledge to communities that they already know. In other cases, technologically or social inappropriate solutions are marketed to communities by organisations genuinely trying to help, but who don't have a realistic understanding of the situation on the ground. Sometimes successful projects are discontinued due to perceived lack of success when in reality, the project was just starting to gain momentum. Other times projects continue spending money and resources long after the community has discovered problems with the project, but not communicated them to the organisation managing the project. All of these problems can be aided by a strong socio-economic monitoring programme. When organisations empower local people to conduct these surveys, they strengthen their capacity to adaptively manage projects while saving time, money, and community good will.

Full SOCMON surveys are not needed for every project or sub-project. They are most useful for measuring long-term changes in communities and for gaining deeper understanding of problems facing the community. Indeed, over surveying can be a major problem. However the techniques of key informant interviews and focus groups should be used often to gather feedback on project success and to test new ideas.

As a final note, it should be remembered that while SOCMON is a great way of collecting large-scale data on communities, it is not a replacement for friendly one-on-one dialogue between NGO staff, community leaders and community members. Often the best information comes from these personal exchanges of information and knowledge within the context of friendship and partnership. Above all, these are the information sources that should be sought out and developed and occasionally confirmed with SOCMON studies.

Appendix: Table of survey methods, advantages and disadvantages

	DESCRIPTION	BENEFITS	DISADVANTAGES	BEST FOR
Key informant	One on one interviews with individuals who have good knowledge of the topics to be covered in the survey. Community leaders, scientific experts, government officials are common examples of individuals selected.	Fast, cheap way of collecting qualitative data (data about the quality of a particular problem or situation).	Informants may not give an accurate representation of community knowledge or ideas. Non-quantifiable (data cannot be counted) so data analysis limited. Cannot compare variables.	Background information, historical information, non-subjective information (information not likely to be disputed, such as number of schools in a village or number of wells).
Focus group	Group interviews where three to ten people are asked questions.	Faster and cheaper than household and individual surveys. Good for testing new ideas or questionnaires before proceeding with individual surveys.	Respondents may be influenced by other group members. Groups may not give an accurate representation of community knowledge or ideas. Data non-quantifiable.	Understanding complicated problems, gaining background information on community knowledge and attitudes. Pre-testing questionnaires.
Household interview	Interviews with head of household, often in the presence of other family members.	Allows for collection of quantifiable data at the household level.	Head of household may not be representative of knowledge or perceptions of other family members. Expensive and time consuming. Repeated surveying will cause survey fatigue.	Measuring standard of living, population data and education levels (independent variables).
Individual interviews	One on one interview with many individuals.	Allows for collection of quantifiable, representative data on knowledge, attitudes and perceptions.	Most expensive and time-consuming surveys to implement.	Measuring knowledge, attitudes and perceptions.

Socio-Economic Monitoring

INDIAN OCEAN COMMUNITY CONSERVATION HANDBOOK 11

SOCIO-ECONOMIC MONITORING

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AUDIENCE: COMMUNITY SURVEYORS
ARTWORK: NADY RATSIMBAZAFY

blue ventures
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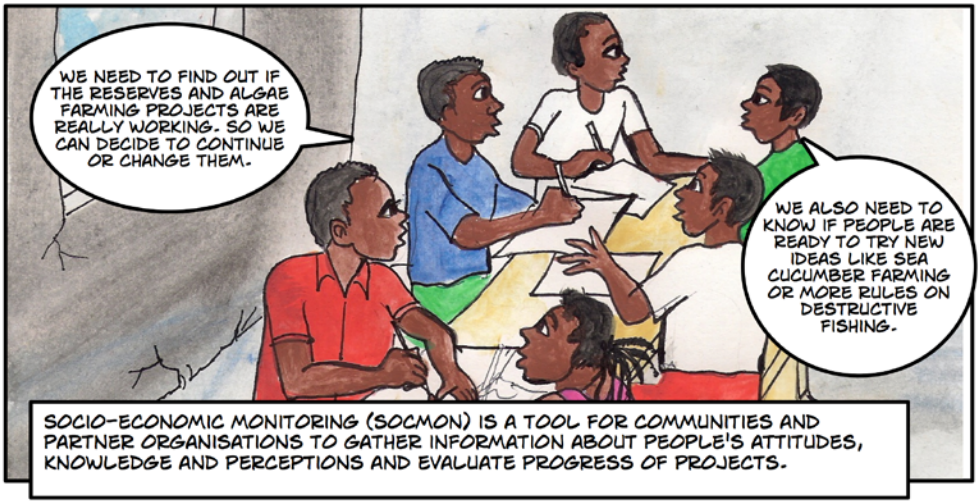
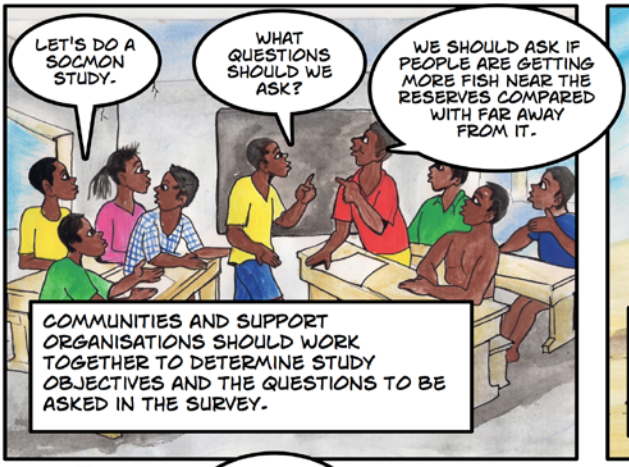
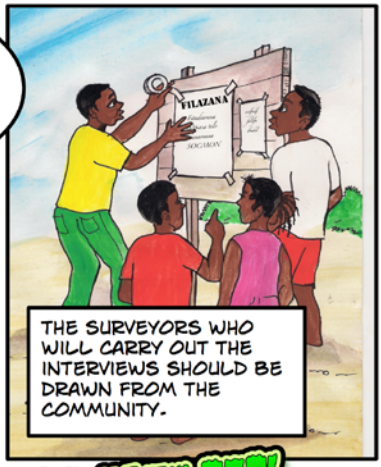
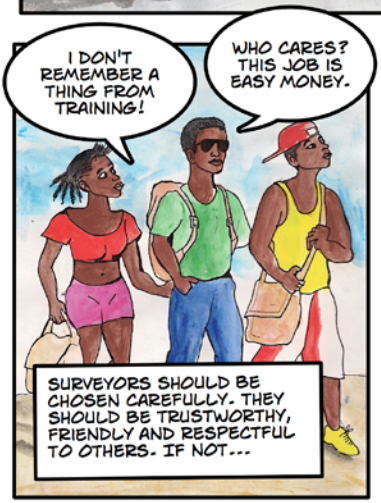
VELONDRIAKE

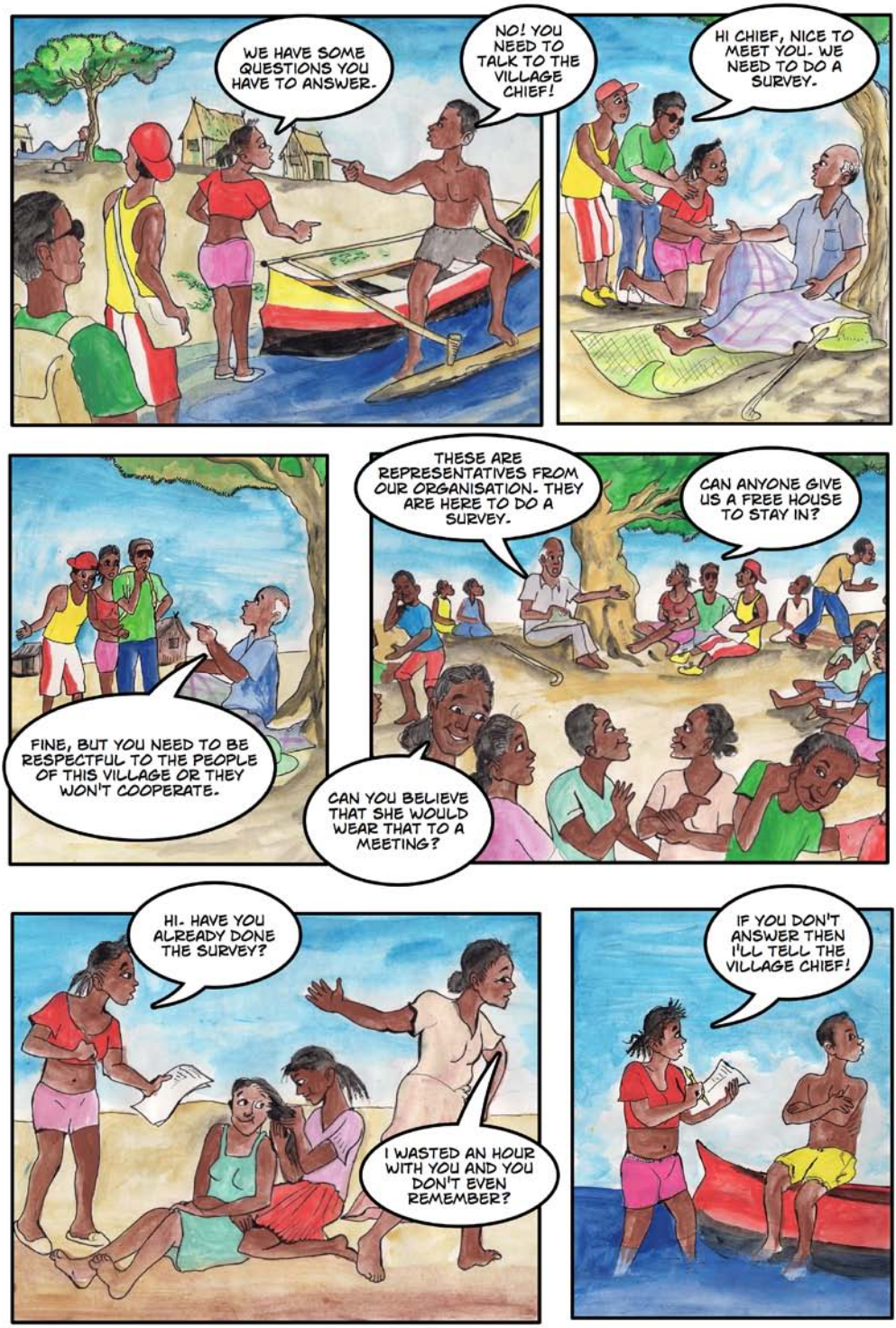

WE NEED TO FIND OUT IF THE RESERVES AND ALGAE FARMING PROJECTS ARE REALLY WORKING. SO WE CAN DECIDE TO CONTINUE OR CHANGE THEM.
WE ALSO NEED TO KNOW IF PEOPLE ARE READY TO TRY NEW IDEAS LIKE SEA CUCUMBER FARMING OR MORE RULES ON DESTRUCTIVE FISHING.
SOCIO-ECONOMIC MONITORING (SOCMON) IS A TOOL FOR COMMUNITIES AND PARTNER ORGANISATIONS TO GATHER INFORMATION ABOUT PEOPLE'S ATTITUDES, KNOWLEDGE AND PERCEPTIONS AND EVALUATE PROGRESS OF PROJECTS.


LET'S DO A SOCMON STUDY.
WHAT QUESTIONS SHOULD WE ASK?
WE SHOULD ASK IF PEOPLE ARE GETTING MORE FISH NEAR THE RESERVES COMPARED WITH FAR AWAY FROM IT.
COMMUNITIES AND SUPPORT ORGANISATIONS SHOULD WORK TOGETHER TO DETERMINE STUDY OBJECTIVES AND THE QUESTIONS TO BE ASKED IN THE SURVEY.


FILAZANA
THE SURVEYORS WHO WILL CARRY OUT THE INTERVIEWS SHOULD BE DRAWN FROM THE COMMUNITY.

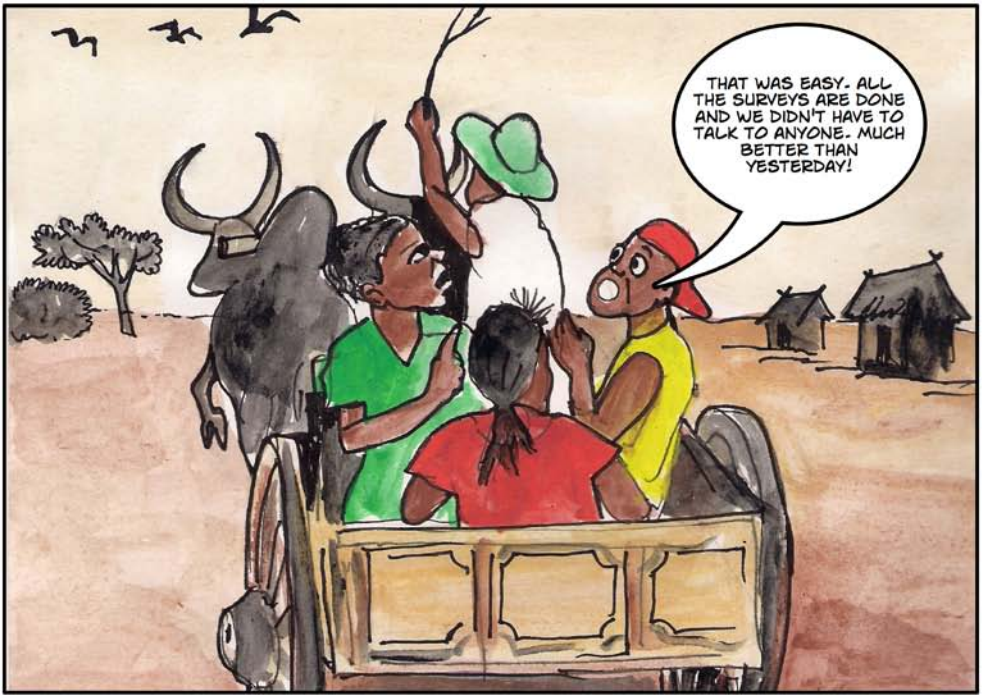

I DON'T REMEMBER A THING FROM TRAINING!
WHO CARES? THIS JOB IS EASY MONEY.
SURVEYORS SHOULD BE CHOSEN CAREFULLY. THEY SHOULD BE TRUSTWORTHY, FRIENDLY AND RESPECTFUL TO OTHERS. IF NOT...

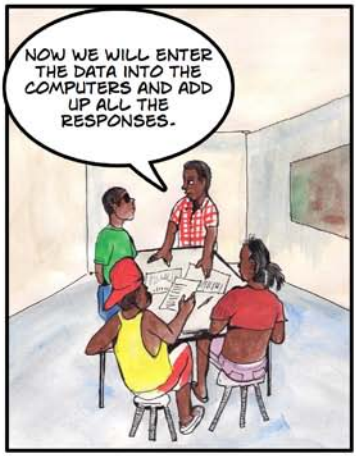

WHEN SOCMON GOES BAD!
NO TIME, OLD MAN. GOTTA GO!
HELLO! COME SIT WITH ME AND TALK FOR A MINUTE.
THEY SHOULD DRESS RESPECTFULLY AND BE FRIENDLY TO EVERYONE.


WE HAVE SOME QUESTIONS YOU HAVE TO ANSWER.
NO! YOU NEED TO TALK TO THE VILLAGE CHIEF!
HI CHIEF, NICE TO MEET YOU. WE NEED TO DO A SURVEY.
FINE, BUT YOU NEED TO BE RESPECTFUL TO THE PEOPLE OF THIS VILLAGE OR THEY WON'T COOPERATE.
THESE ARE REPRESENTATIVES FROM OUR ORGANISATION. THEY ARE HERE TO DO A SURVEY.
CAN ANYONE GIVE US A FREE HOUSE TO STAY IN?
CAN YOU BELIEVE THAT SHE WOULD WEAR THAT TO A MEETING?
HI. HAVE YOU ALREADY DONE THE SURVEY?
I WASTED AN HOUR WITH YOU AND YOU DON'T EVEN REMEMBER?
IF YOU DON'T ANSWER THEN I'LL TELL THE VILLAGE CHIEF!


FINE. HERE'S SOME MONEY.
I HAVE 7 PIROGUES, A TV AND I NEVER USE DESTRUCTIVE GEAR.
I HAVE FOUR CHILDREN, TWO BOYS AND TWO GIRLS. THE OLDEST IS 10
UH HUH. AND HOW MANY OF YOUR CHILDREN GO TO UNIVERSITY?
I NEED TO ASK YOU SOME QUESTIONS.
WHAT A STRANGE WOMAN?
WHACK!
I DID 5, HOW MANY DID YOU DO?
I GOT 2 DONE.
I'M BORED. LET'S STOP FOR TODAY.


THIS WILL TAKE FOREVER TO FINISH!
LET'S JUST FILL THEM IN- NOBODY WILL KNOW.

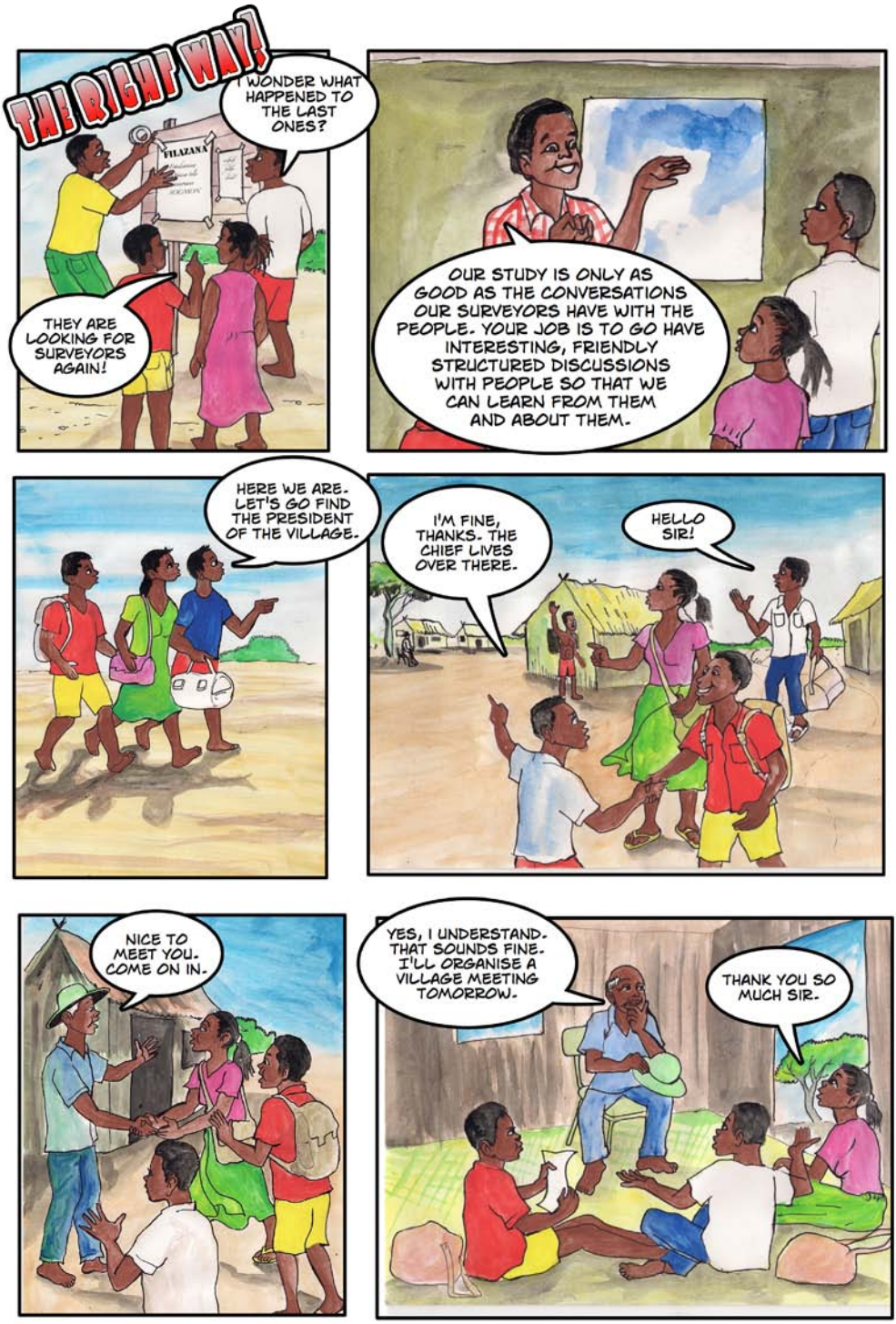

THAT WAS EASY- ALL THE SURVEYS ARE DONE AND WE DIDN'T HAVE TO TALK TO ANYONE- MUCH BETTER THAN YESTERDAY!

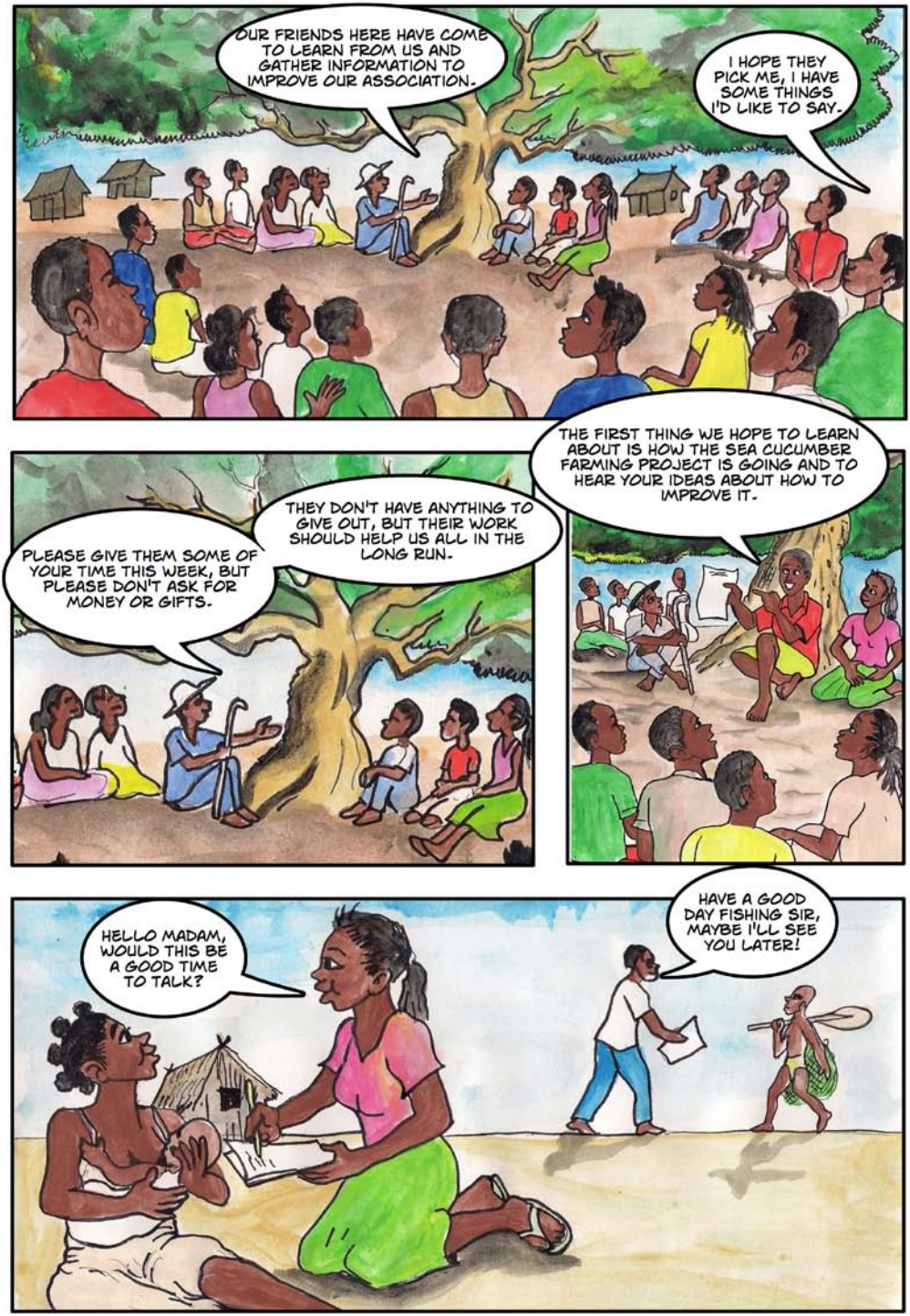

NOW WE WILL ENTER THE DATA INTO THE COMPUTERS AND ADD UP ALL THE RESPONSES.


I HOPE HE DOESN'T NOTICE THAT THESE ANSWERS ARE MADE UP!!

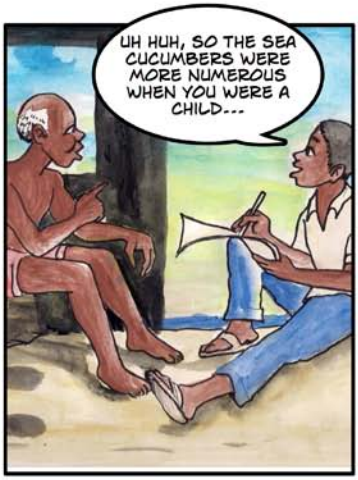

ERROR


THESE ANSWERS ARE CLEARLY MADE UP! YOU LIED AND CHEATED!


THE RIGHT WAY?
I WONDER WHAT HAPPENED TO THE LAST ONES?
THEY ARE LOOKING FOR SURVEYORS AGAIN!
OUR STUDY IS ONLY AS GOOD AS THE CONVERSATIONS OUR SURVEYORS HAVE WITH THE PEOPLE. YOUR JOB IS TO GO HAVE INTERESTING, FRIENDLY STRUCTURED DISCUSSIONS WITH PEOPLE SO THAT WE CAN LEARN FROM THEM AND ABOUT THEM.
HERE WE ARE. LET'S GO FIND THE PRESIDENT OF THE VILLAGE.
HELLO SIR!
I'M FINE, THANKS. THE CHIEF LIVES OVER THERE.
NICE TO MEET YOU. COME ON IN.
YES, I UNDERSTAND. THAT SOUNDS FINE. I'LL ORGANISE A VILLAGE MEETING TOMORROW.
THANK YOU SO MUCH SIR.


OUR FRIENDS HERE HAVE COME TO LEARN FROM US AND GATHER INFORMATION TO IMPROVE OUR ASSOCIATION.
I HOPE THEY PICK ME, I HAVE SOME THINGS I'D LIKE TO SAY.
THE FIRST THING WE HOPE TO LEARN ABOUT IS HOW THE SEA CUCUMBER FARMING PROJECT IS GOING AND TO HEAR YOUR IDEAS ABOUT HOW TO IMPROVE IT.
THEY DON'T HAVE ANYTHING TO GIVE OUT, BUT THEIR WORK SHOULD HELP US ALL IN THE LONG RUN.
PLEASE GIVE THEM SOME OF YOUR TIME THIS WEEK, BUT PLEASE DON'T ASK FOR MONEY OR GIFTS.
HELLO MADAM, WOULD THIS BE A GOOD TIME TO TALK?
HAVE A GOOD DAY FISHING SIR, MAYBE I'LL SEE YOU LATER!


SURE, I'VE GOT SOME TIME NOW. LET'S CHAT.

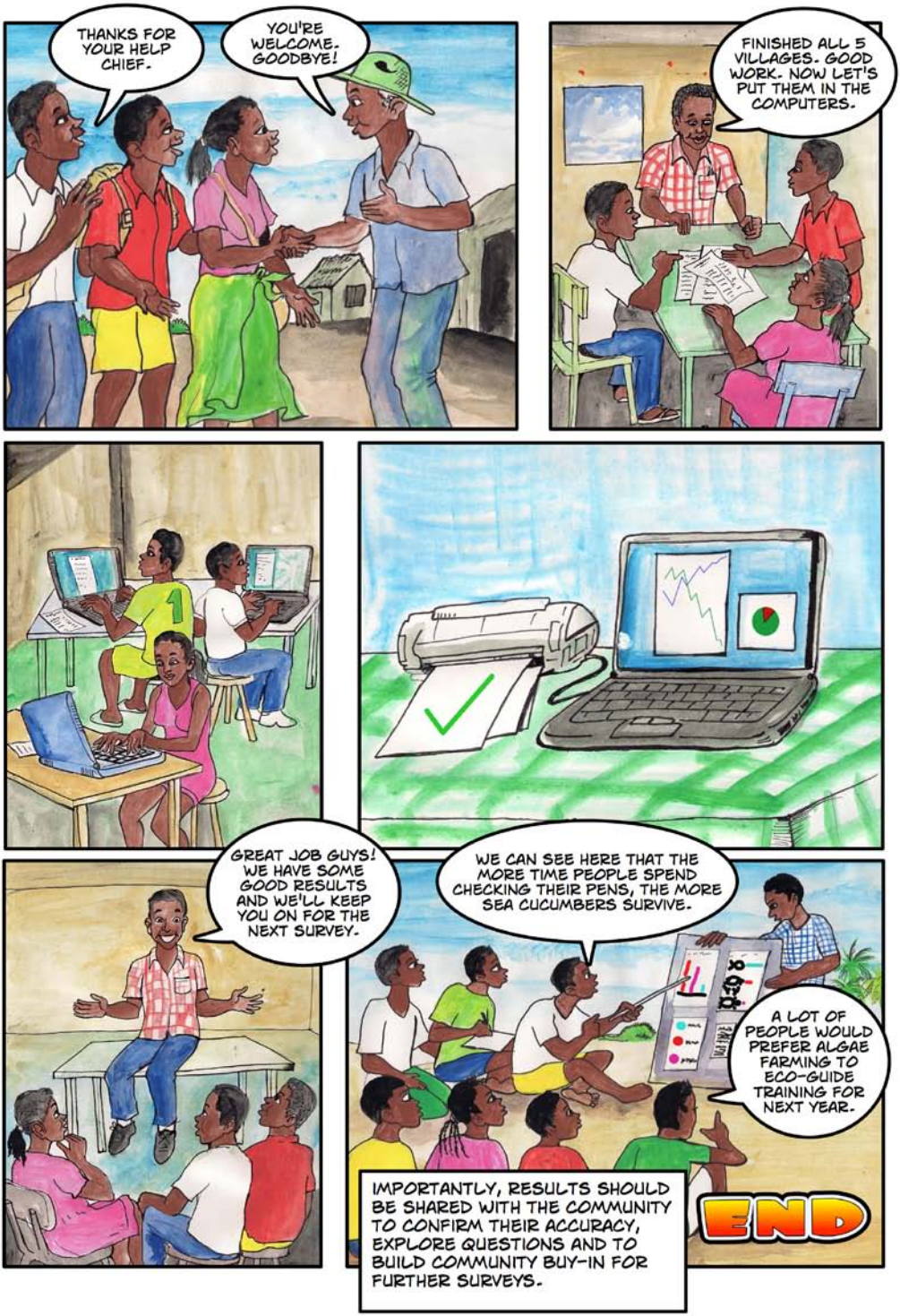

UH HUH, SO THE SEA CUCUMBERS WERE MORE NUMEROUS WHEN YOU WERE A CHILD...


HELLO SIR. WOULD YOU HAVE A FEW MINUTES TO TALK NOW?


COULD YOU BUY ME A COFFEE?
I'M SORRY SIR, I HAVEN'T ANY MONEY WITH ME. I'D BE HAPPY TO COME BACK ANOTHER TIME THOUGH.
NO, THAT'S OK. NOW IS FINE.


OK, SO YOU THINK THAT THE SEA CUCUMBER PENS SHOULD BE LARGER.
NO, THE SAME AREA BUT THEY SHOULD BE TALLER
OK, GREAT. GOT IT.


32 SURVEYS DONE TODAY. WE SHOULD BE DONE IN A FEW DAYS.
I FORGOT TO FILL IN THE ANSWER TO NUMBER 13 FOR THE LAST WOMAN I SURVEYED. I'LL DROP BY AND ASK HER AGAIN TOMORROW.


THANKS FOR YOUR HELP CHIEF.
YOU'RE WELCOME. GOODBYE!
FINISHED ALL 5 VILLAGES. GOOD WORK. NOW LET'S PUT THEM IN THE COMPUTERS.
GREAT JOB GUYS! WE HAVE SOME GOOD RESULTS AND WE'LL KEEP YOU ON FOR THE NEXT SURVEY.
WE CAN SEE HERE THAT THE MORE TIME PEOPLE SPEND CHECKING THEIR PENS, THE MORE SEA CUCUMBERS SURVIVE.
A LOT OF PEOPLE WOULD PREFER ALGAE FARMING TO ECO-GUIDE TRAINING FOR NEXT YEAR.
IMPORTANTLY, RESULTS SHOULD BE SHARED WITH THE COMMUNITY TO CONFIRM THEIR ACCURACY, EXPLORE QUESTIONS AND TO BUILD COMMUNITY BUY-IN FOR FURTHER SURVEYS.
END

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