USING INDIVIDUAL AND GROUP COMMUNITY-BASED METHODS TO DOCUMENT CULTURAL LANDSCAPES ELEMENTS

ALISAN YETKIN, AYLIN
Virginia Polytechnic Institute and State University, aylina83@vt.edu

CLEMENTS, TERRY
Virginia Polytechnic Institute and State University, tclement@vt.edu

1 ABSTRACT

Community-based studies encourage people to speak out, lending their voices and memories to studies that seek to document community awareness and perceptions of local landscapes. Sanoff (2000) states that "residents are more aware of the realities of their own environments than outside professionals". This is a reflective critique of a community-based approach used to document the cultural landscape elements of Findikli in Rize province located near the Black Sea in the northeast of Turkey. The critique reveals advantages and limitations to research methodologies that researchers should consider as they design their community-based studies. This paper reviews six methods used in the study to document people's awareness and perceptions of their current and past physical and social landscapes. The methods include: discussion, survey, oral history interview, photo survey, photo-voice recording and spatial mapping. Group sizes ranged from individual to small groups with 2 or 3 participants, and large groups of 4 to 8 participants. The critique presents and reviews the opportunities such as ability to recall, flexibility to work with participants and challenges such as language barriers, time limitations to collect quality and quantity of data encountered with the different methods based on group size. This paper offers researchers a practical perspective on factors to consider when implementing community-based methods.

1.1 Keywords

Cultural Landscape, Cultural Heritage Documentation, Community Participation Research Methods

2 INTRODUCTION

This paper evaluates the effectiveness of community participation methods in documenting cultural landscape elements and it provides a practical perspective on factors to consider when implementing community-based methods for researchers in their studies of cultural landscapes.

Community-based methods implemented in this study include: discussion, survey, oral history interview, photo survey, photo-voice recording and mapping. This combination of methods allows collection of qualitative and quantitative data as well as factual and perceptual information of cultural landscape elements in a district. All methods were conducted in different group sizes: individual, small group (2 or 3) and large group (4 to 8). The research methods study showed that different group sizes created opportunities to collect high quality and quantity of information whereas they created limitations to collection of high quality and quantity of information in different methods. This paper demonstrates the effectiveness of community-based methods in collecting high quality and quantity of information about local cultural landscapes by using either a single method or multiple methods.

2.1 Literature review of community participation methods

Community-based methods are used to obtain more information about a community and its affiliations. Fagerholm and Käyhkö (2009) pointed out that in developing countries local scale social landscape values are missing when natural resources are under the pressure of new developments (p.44). The way to learn local scale landscape values is possible with community based methods. There are various ways to engage people (individuals or groups) in community projects. The specific characteristics of a particular study, such as its project goals, objectives, and time frame, determine the most effective means of engaging communities in that project.

Community-based methods are good for documenting cultural landscape elements. Community participation methods provide information regarding landscape meanings in the eyes of a community as well as landscape values and significance with which they are imbued. Sanoff (2000) emphasized that community participation is necessary because local people "are more aware of the realities of their own environments than outside professionals. They have a sense of what will work and what will not work" also of what is valued more or less (p.7). Community participation methods encourage people to speak out, lending their voices to studies that seek to understand their communities. In this regard, to obtain data on cultural landscapes past and present, local people must be directly participating.

A range of community participation methods are necessary to reveal information such as local demographics, people's landscape perception, and meanings. A combination of discussion, survey, oral history interview, photo survey, photo-voice recording and mapping were selected for the documentation study. For example, community surveys can be designed to collect demographic data such as gender, race, and education levels in the community population (Asah, Lenentine, and Blahna, 2014, p.111). Another example, oral history interviews reveal meanings of the past (Abrams, 2016, p.12). Photo-voice recordings convey people's feelings, thoughts, and perceptions. (Wang and Burris, 1997, p.369). Many scholars value maps as tools for extracting the geographical, personal, or social meanings of a place (Roberts, 1994, p. 135; Boyer, 1996, p. 206; Powell, 2010, p.539). These meanings are derived from the relationships or connections between humans, place and nature. Mapping offers an easy way to read multilayered landscapes and to document both physical and social components of landscapes in cultural landscape studies. Group mapping and discussions also benefit from communal remembering and story-telling.

2.2 Introduction of the large study: understanding of physical and social landscapes of Findikli under the threat of losing culture

This research method critique focuses on methods used to document cultural landscape elements. Findikli, a district of Rize province in northeastern Turkey (see Figure 1), was selected as a case study area as it has been under the threat of losing traditional physical landscapes and cultural knowledge due to rapid landscape change. In order to understand how the cultural landscape has changed because of human engagement with the landscape, both qualitative and quantitative data collection methods were implemented. A comprehensive review of the existing literature and the official archives of Findikli revealed insufficient information about people's relationships with the landscape such as community perceptions of physical and social landscape change and the spatial organization of dwelling areas. Therefore, community participation methods were conducted in a data collection to reveal information hidden in people's minds. To gather both factual and perceptual information, community participation methods were conducted in

different group sizes. This critique evaluates the effectiveness of community participation methods in documenting cultural landscape elements by comparing the methods used in different group sizes and their limitations and opportunities to collect high quality and quantity of information. Also, this critique provides a practical insight of community participation methods for researchers in their studies of cultural landscape.
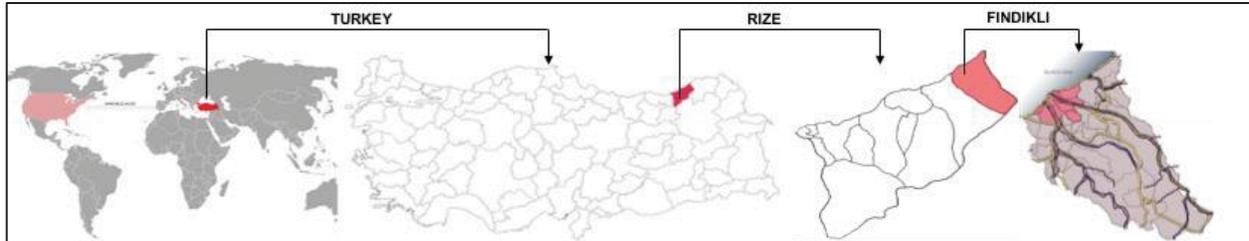

Figure 1. Location of Findikli. Figure by Alisan (2013)

2.3   Case study area

Findikli has three different types of settlement patterns: urban, mixed rural and urban, and rural. The urban structure of Findikli is represented by the downtown area. The mixed rural and urban structure includes eight neighborhood settlements. Twenty-two villages form the rural pattern of Findikli. These are scattered along the valleys close to the river or mountains.

Two ethnic groups reside within Findikli: Lazi (Laz, Lazuri) and Hemshin (Hemsin). Both groups have been living in this area for thousands of years. However, Lazi and Hemshin people share the same physical setting in only a few settlements. Typically, Hemshin villages are located close to the peak of mountains, and Lazi villages are near the coast. This geographic difference affected Lazi and Hemshin daily activities and relations to their environment. For example, while Hemshin people are known for their practice of moving livestock from lowlands to highlands in the summer for grazing (transhumance). The Lazi people are known for cultivating their land for corn, hazelnut, and vegetable, and aquaculture. (Simonian 2007) (see Figure 2) The area is more recently developed for tea production.

Figure 2. Hemshin people practice transhumance (on the left), Lazi people produce tea. Photo on the left by permission of Erkan Aksu, photo on the right by the author

Findikli is defined by its dramatic natural borders, the Black Sea and the Kackar Mountains. The mountains dominate the area and create deep valleys with a network of dense flowing waterways. Findikli is located in a narrow strip of land between the mountains and the sea. Arable lands are very limited. Uneven terrain created by valleys and rivers caused the dispersed settlement patterns in the region (see Figure 3). Agricultural lands are generally located on the steep slopes. The climate makes life harder because there are heavy rains most of the year. The rugged terrain and rain create challenging living conditions for local people, which require survival skills such as energy, strength, and resourcefulness (Hann, 2007, p.342). The ability to work efficiently and cooperatively is valued in the community because of the need to bring in harvests quickly in the face of unpredictable weather conditions.

Overtime geographic locations and different ethnicities created different cultural practices and unique landscape heritage for each group. However, today, the different ethnic groups in Findikli have a shared culture and rituals such as practicing agriculture, playing **the** traditional instrument *tulum,* and dancing *horon.*

Figure 3. Dispersed settlements in the topography of Findikli. Photo by permission of Erkan Aksu

3   METHODS USED TO DISCOVER FINDIKLI'S CULTURAL LANDSCAPE ELEMENTS

In general, landscapes are threatened by rapid landscape change due to human activities that cause natural and cultural heritage to be lost (Roberts, 1994). In order to diminish heritage loss, organizational bodies such as The United Nations Educational, Scientific and Cultural Organization (UNESCO) and The International Council on Monuments and Sites (ICOMOS) conduct cultural landscapes studies to document natural and cultural landscape elements. Similarly, Findikli has been under the threat of losing its traditional physical landscape and cultural knowledge due to rapid landscape change caused by newer monoculture agricultural practices. In this regard, a documentation study was designed for cultural landscape research and planned to use community participation methods to collect perceptual and factual data regarding physical and social landscape elements. Six community participation methods were selected: discussion, survey, oral history interview, photo survey, photo-voice recording, and mapping. In order to implement these methods, the site was visited two times for gaining access to community members; to build trust while meeting individuals and groups; to introduce the study to community groups and members; to generate interest within established community networks; to obtain access to range of individuals and community members; and to recruit participants for the research study.

During the first site visit, official archival documents of Findikli were obtained and connections to community networks were established. Between the first and second site visits, a research protocol of community-based methods was presented to the Institutional Review Board (IRB) for reveiw. Final IRB approval initiated the second site visit and plans were made to implement methods and to inform community members about community meeting to be held. Also, an aerial photo map was created for the community mapping activity.

In this research method critique, the conducted methods are introduced in three phases; preparing to meet the community, data collection and data analysis (see Table 1). In the first phase, the design of the research methodology and the prerequisites for methods to be conducted are presented. The second phase included recruitment of participants and implementing methods on-site including group size, limitations and opportunities. The third phase presents findings in this research method critique. Cross relationships between methods and the quality of collected data are presented in the findings.

Table.1 Community participation methods and expected information types to be collected.

METHODS	TYPE OF INFORMATION				
	OBJECTIVE DATA			SUBJECTIVE DATA	
	Demographics	Spatial Organization	Land-Use	Physical and Social Landscape Values	Physical and Social Landscape Change
Discussion				●	●
Survey	●		●	●	●
Oral History Interview				●	●
Photo Survey		●	●	●	●
Photo-voice Recording				●	
Mapping		●	●		●

The research methods were designed to collect both objective and subjective data via determined community participation methods. Each method was designed to collect specific types of information such as demographics, spatial organization, land-use, physical and social landscape values and perception of change.

3.1   Phase 1: Preparing to meet the community

Selected community participation methods are discussed in the order they were implemented on-site (see Figure 4). Methods were selected and refined to help determine where to meet with community members and to account for the types of information to be collected. The research methods design included gaining trust and access to the community members as preparation for implementing methods.

3.1.1   Discussion

The purpose of this method was to recruit participants to the study and to gather main topics **during** discussions with community groups and members. This approach was important to introduce the documentation study to the community and to gain trust among them. Discussions were expected to occur spontaneously in small community gatherings. There was no prerequisite for this method as the initial discussions took place in community gathering places such as coffee houses and association places.

3.1.2   Survey

A survey instrument was used to collect demographic information about the Findikli community; and perceptual information of landscape change and values. The survey was distributed to people with different ethnicities, ages and socio-economic levels.

The paper-based survey was designed to gather information in four categories. The first category included demographic information of the community such as age, gender, socio-economic status and cultural backgrounds. This was important because the Findikli community was formed by different ethnic groups and cultural differences can affect people's perceptions of their landscape change and value. In the second category, questions about people's relationships to farms were used to learn how people use(d) their lands and for what purposes including past and present interactions between people and landscapes. Questions in the third category were asked to collect people's perceptions of environmental and social life change. How and how much physical and social landscapes have changed and when people noticed the change can reveal the impact of these changes in the Findikli community. The last category of questions include people's perceptions of environmental and social life values. Collecting people's values relating to the past and present is important to making comparisons of people's perception of past and present landscape perception.

The survey method was designed to include at least one participant from 30 different settlements around Findikli. The survey questions were developed in response to information about Findikli's physical and social landscapes and the community fabric as drawn from the literature review and archival research. Preparation of the survey took significant time and effort to make the questions clear and to design self-explanatory tables and questions for different age groups. Due to personal questions in the surveys, they were intended to be filled out by individuals during the community meetings.

3.1.3   Oral History Interview

Oral history interviews were conducted to collect in-depth information regarding perceptions of physical and social landscape changes and values. Stories, memories and experiences can be extracted by asking more questions about the past as well as comparing the past and present. Oral history interviews drew specific details from people's minds about relationships between people and landscape.

This method was designed to take place in the **participants' homes**. Participants were free to talk while walking or sitting at the table, inside or outside. A voice recorder is an essential tool to record what the interviewees **said.**

3.1.4   Photo Survey

The photo survey method was used to collect factual and perceptual information of landscape changes and values. Photo surveys reveal varying interpretations of the same pictures by individuals or groups. For example, a picture that shows a traditional agricultural practice on the land might remind people of hard work in the past or good old days. In addition to the written survey questionnaire, a photo-survey questionnaire was used to trigger participants' memories and experiences. Participants were asked to tell what they saw in each photo, how it has changed over time, and what they feel when looking at the photos.

The photo album included past and present pictures of physical and social landscapes of Findikli. Pictures were compiled from archival documents, personal collections from community members, theses and dissertations about Findikli and photos taken during the first site visit. Therefore, the prerequisites for photo survey method were literature review, archival research, and a previous site visit to establish connections with people who had photo collections. Photos have to be clear and big enough for older participants to see details in the pictures. This method was planned to be done immediately after the oral history interview if the interviewee was willing to participate.

3.1.5   Photo-voice recording

The photo-voice recording method was to collect perceptual information of landscape values of landscapes and landscape elements chosen by individual participants. It was important to understand how people described what they saw and the relation between the actual photo and the participant's interpretation of the photo. Another significant point of this method is whether people rely on the factual information or content to interpret what they see or upon their feelings, thoughts and stories.

The participants were asked to take a picture of what they value most in the landscape. It could be a view of the mountains, or a tool used in the past for agriculture practice. There is no prerequisite for this method except the equipment when implementing the method. This method was planned to be completed after the photo survey if the interviewee was willing to participate. A photo camera and voice recorder were essential equipment for this method.

3.1.6   Mapping

The mapping method collects factual and perceptual information about the spatial organization of physical and social landscape elements, land-use, and social activities that had taken place in the past and present landscapes of Findikli. This method was used to reveal landscape change visually. Also, this method was important as there were not any records in Findikli that show such physical landscapes and spaces as historic and present village settlement patterns, dwelling units, trails and motor vehicle roads that connected districts.

Mapping was designed in two parts. The first part was for individuals who participated in oral history interview study. Participants were asked to draw both their childhood neighborhood and their current neighborhood as cognitive maps. They were asked to write the activities that had taken place on the maps, as well. The second part was designed as a community meeting activity. Participants were asked to gather around an aerial photo of Findikli as a map and to point out the location of things and events they remembered from the past, identify current landscape elements and present activities. Individual mapping activities were intended to be conducted after the photo-voice recording activity. Community mapping was designed to take place during the second community meeting.

A high-quality aerial photo is required for the mapping method. These were obtained from authorized agencies during the first site visit. Equipment for the mapping activity included drawing papers, color pencils, and post-it notes. Also, a voice recorder was an essential tool to record what all participants said.

3.2   Phase 2: Data collection

Data collection in phase two required developing plans to recruit participants for the community participation methods, to implement the various research methods on-site in different group sizes, and anticipate limitations and opportunities that could occur. Data collection was conducted in two site visits. Archival document collection, field visits, and field observations were conducted as a groundwork study during the first site visit, while additional field observations and community-based methods were conducted during the second site visit.

During the first site visit, a groundwork study was conducted to initiate the data collection process. Data was collected in four areas: archival document collection, site visits, field observation, and community-based methods.

Community-based methods and field observations were conducted concurrently during the second site visit. We met and reconnected with people to participate in the community-based research methods. Reconnection with the community members, referred to earlier as discussion, occurred in coffee houses allowing the researchers to generate interest in the study. Community-based methods were designed to be conducted in a certain sequence. The survey method was conducted first to recruit participants for the oral history interviews as well as to learn the general distribution of the community. Oral history interviews were the second method conducted to reveal deeper perceptions of landscape change. These were followed by the photo survey method which illustrate newly shared memories with the photographic examples of physical and social landscape elements. Photo-voice recording was conducted later if there were a missing landscape element in the photo album compilations. Cognitive mapping activities were designed to extract individuals' perceptions of the spatial organization of social activities in the landscape that were not explained by words or illustrated by pictures. Group mapping was designed for the same purpose as the individual cognitive mapping but from the community's perception**.**

3.2.1   Recruitment of participants

Community-based methods required researchers to create and build upon personal connections with community members. We visited the site to gain access to community members, build trust while meeting individuals and groups. Site visits also allow gathering archival information about the study area.

The first site visit was for creating a network in the community by gaining trust and access to them; introducing the study to the community; and conducting archival research by visiting governmental and authorized agencies in local, regional and national level. The second site visit was for generating more interest within the community network; obtaining access to and recruiting a diverse range of participants; and conducting methods.

Relationships were established with members of Findikli Associations, grass-root initiative groups, and headmen of Findikli settlements by visiting them in their places. The documentation study was introduced to members of Findikli Association in community meetings. Researchers attended their events to develop trust with members of the association. Also, we visited governmental agencies to search their archives for old maps, pictures, books, and poems about Findikli.

During the second site visit, we reconnected with people contacted in the first site visit. We visited coffee houses where people usually meet. We had spontaneous discussions about Findikli's physical and social landscape change. We introduced the documentation study in these small gatherings, as well. By by stating our plan to gather community members to talk about the study and handing out the survey questionnaires. We visited the Findikli Headmen Association to meet each headman of the village and we invited them to the community meeting. The date, time and place for the community meeting was announced on flyers hung at several community meeting points. Also, people heard about the meeting by word of mouth (see figure 4). There was a snowball effect in the Findikli community to recruit participants for the survey. The survey questionnaires were handed out at the meetings and collected a week later. Participants could indicate their willingness to participate in an oral history interview. Willing participants were contacted and meetings scheduled in a place of their choice. All participants chose their family farmstead in their village. Oral history interviews were followed by photo survey, photo-voice recording and individual cognitive mapping with willing participants. Some participants did all methods, some of them did only photo survey, some of them photo survey and photo voice recording. Sample size for all methods were not the same but all methods were conducted.

1. SITE VISIT

Gaining Access to Community Members in Community

Gaining Trust

| Community Association | Headmen Association |

PHASE 1

PREPARATION

Initiating IRB Research Protocol
- Preparing Survey & Photo Survey Questions
- Preparing Interview Protocol
- Preparing Consent Forms
- Preparing Recruitment Flyers

Preparing equipment for each method

| List-serving to Members | Visiting Each Headman |
| Member & Resident in FINDIKLI | Share Cropper & Wage Worker |

Meeting with Community

Setting Time/Date/Location

Community Meeting for Survey

Recruiting Participants for Oral History Interview, Photo Survey, Photo Voice Recording and Cognitive Mapping via Last Survey Question

2. SITE VISIT

Setting Meetings for Interview

Conducting
Oral History Interview
Photo Survey
Photo Voice Recording Cognitive Mapping

Selecting a Settlement with the Largest Number of Participants Based on the Survey Participation

Recruiting Participants for Community Mapping via headman of the settlement

Setting Time/ Date/ Location

Conducting Group Mapping

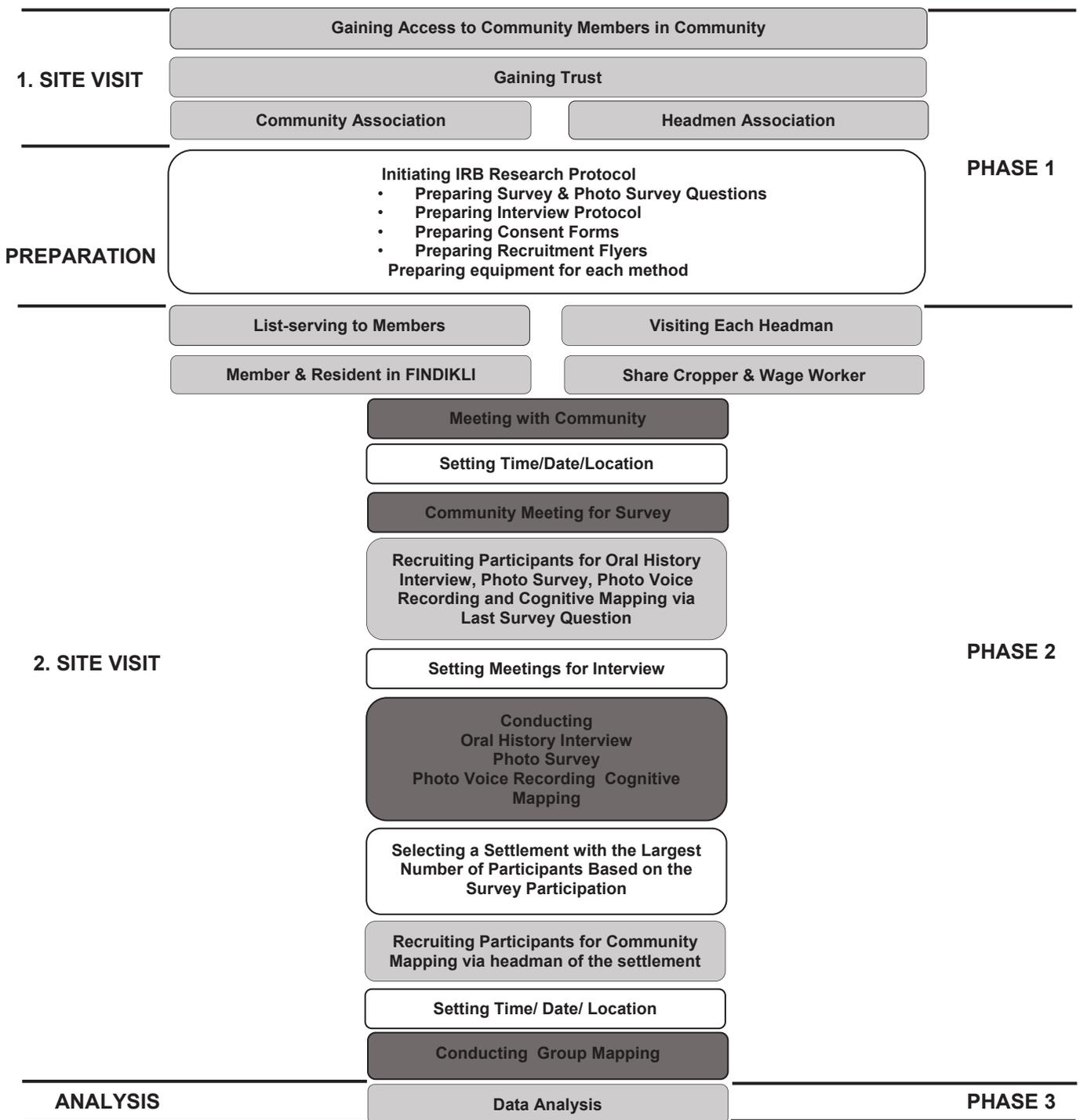**PHASE 2**

ANALYSIS

Data Analysis

PHASE 3

Figure 4. A flow chart for recruitment of participants and methods. Process of conducting methods was divided into 3 phases. Phase 1 is preparing to meet community, Phase 2 is data collection, and Phase 3 data analysis. Lighter grey refers recruitment participants, darker grey refers methods and white refers researcher preparations. Diagram by the authors

Some survey participants provided names for the researcher to contact for additional interviews on landscape change and local cultural heritage. Eight participants were recruited via snowballing. The researcher conducted the survey in person with these eight participants during the interview process. Consequently, seventy survey questionnaires were collected at the end of the data collection process (see Figure 5).
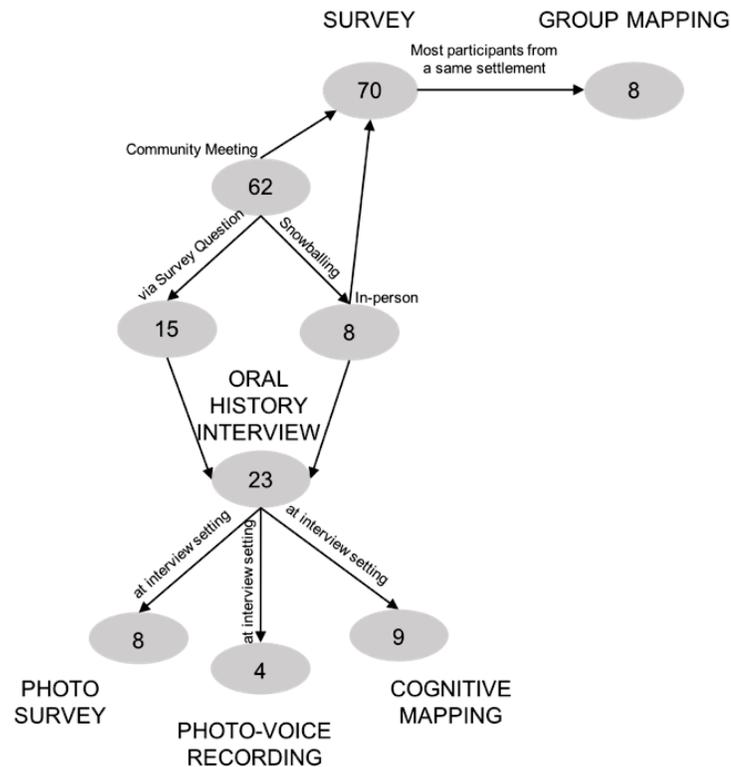

Figure 5. Distribution of number of participants in each method

3.2.2   Implementation methods

All methods except community mapping were designed to be conducted individually. However, 'on-site experiences necessitated redesigning the sample size for each method. Three group sizes were used during the study:

- *Individual*; participants became a part in the study individually.
- *Small Groups of 2 or 3 participants*; these participants were not recruited intentionally. Some visitors wanted to be part of the study when we were conducting the method individually. They participated in the study voluntarily, spontaneously and signed consent forms.
- *Large Groups of 4 to 8 participants*; participants were recruited by snowball effect. Key people came together for the study. Group mapping participants were recruited via the village headman.

Discussions were conducted in small and large groups. This method took place spontaneously in commuity gathering places with a wide range of residents in Findikli. People were free to join or leave at any time during the discussion session. Discussions were life-based conversations between the researchers and the community. Participants willing shared their memories, experiences and stories about Findikli's past and present landscapes. Small group discussions went longer than large group discussions as there were less distractions such as frequent change in number of participants. It was also easier to follow the discussions in the smaller groups due to the lower number of participants.

Surveys were conducted individually. The 70 participants represented each settlement of Findikli. However, the survey method process took place slightly differently than how it was planned. Survey questionnaires were handed out in the beginning of the meeting but participants requested to turn them in later in the week as the questionnaire was very long. Therefore, a convenient collection point was

determined immediately. Survey questionnaires were supposed to be filled out by the participants on their own. However, we noticed that some of the participants left some questions blank. Therefore, we decided to conduct subsequent surveys in person with oral history interviewees to have a chance to make the questions clearer. By doing so, we could gather more information as we explained the questions participants did not understand. We only had a chance to review survey questions again with the participants who were willing to participate in the interviews rather than all participants due to time limitation.

Oral History Interviews were conducted in all group sizes. Individual interview participants were recruited via community meetings held for the survey method. Interested people included contact information at the end of the questionnaire. However, since some interviewees wanted to be interviewed in their place, family members or neighbors spontaneously engaged in this activity as well.

Photo Surveys were conducted individually and in small groups. Oral history interviews were followed by photo surveys to visually trigger participants' memories. Initially photo surveys were conducted in the same size groups as the oral history interviews. However, it was hard for all participants to see photos at the same time in the large group size. Also, it was hard for the researchers to collect responses for each photo. Thereafter, photo surveys were conducted individually and in small groups.

Photo-voice recordings were conducted only individually. Participants were recruited in the meeting for individual oral history interviews. After the finishing the photo surveys some individuals wanted to participate in the activity. Only 4 interviewees were eager to participate due to such limitations as time, unexpected visitors, and old age restrictions.

Mapping was conducted individually and in large groups. The meetings were in a different setting for each group size. Individual cognitive mapping was completed with interviewees who were able to draw spatial relationships. 9 interviewees participated. Participants for the group mappings were recruited via the headman of a settlement with the largest number of participants. The group mapping was designed to engage all interviewees in the activity of mapping on the aerial photo of all settlements of Findikli. However, we noticed when conducting the methods, participants only knew their village's past landscapes.

4   FINDINGS: EFFECTIVENESS OF METHODS

After completing analysis of the data collected, the effectiveness of the community based research methods was evaluated in terms of quality and quantity of data collected, limitations and opportunities of implementation methods and the combination of methods.

4.1   Evaluation of data collection

The study demonstrates the types of information collected using each method and the quality of information gathered. The information includes factual and perceptual information. Factual information is observable and measurable data whereas perceptual data reflects participants' point of views. Both factual and perceptual data were subcategorized as either quantitative or qualitative data (see Table 2). Table 2 presents a guide for the researchers to determine which methods were found to be more appropriate to collect specific information. For example, the oral history interviews provided quantitative and qualitative land use information; however, quantitative-perceptual information of spatial organization was not derived from oral history interview method.

4.2   Limitations and opportunities of methods and group sizes

Limitations and opportunities related to the implementation of the community based research methods are described below.

- *The effort to prepare questions* includes required time and effort as well as groundwork process before conducting methods.
- *Flexibility is required to work with participants* setting dates, times and locations of meetings for each method and provide accessibility to participants.
- *The researcher needs flexibility in each method* to ask additional questions to get more detailed information.
- *Credible participants* with local knowledge are needed; they are more aware of the area and changes; older residents had more experience in Findikli.
- *Group Size Dynamics* include individual and interpersonal dynamics as well as their interactions with the researcher. Participants' behaviors and reactions to the questions vary with group size.

Table.2 Detailed classification of information types.

METHODS	FACTUAL INFORMATION		PERCEPTUAL INFORMATION	
	Quantitative	Qualitative	Quantitative	Qualitative
DISCUSSION	Physical and Social Landscape Change (only in large group)	Land-Use Physical and Social Landscape Values (only in small group) Physical and Social Landscape Change		Demographics (only in small group) Physical and Social Landscape Values (only in small group) Physical and Social Landscape Change (only in small group)
SURVEY	Demographics Land-Use	Demographics Land-Use Physical and Social Landscape Elements	Physical and Social Landscape Change	Land-Use Physical and Social Landscape Values Physical and Social Landscape Change
ORAL HISTORY INTERVIEW	Demographics Spatial Organization Land-Use Physical and Social Landscape Elements Physical and Social Landscape Change	Demographics Spatial Organization Land-Use Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change	Demographics Land-Use Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change	Demographics Spatial Organization Land-Use Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change
PHOTO-SURVEY	Spatial Organization Land-Use (only individual)	Demographics Spatial Organization Land-Use Physical and Social Landscape Elements Physical and Social Landscape Change		Demographics (only individual) Spatial Organization Land-Use Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change
PHOTO-VOICE RECORDING		Spatial Organization Physical and Social Landscape Elements		Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change
MAPPING	Spatial Organization Physical and Social Landscape Elements Physical and Social Landscape Change	Demographics Spatial Organization Land-Use Physical and Social Landscape Elements (only in large group) Physical and Social Landscape Values (only in large group) Physical and Social Landscape Change	Spatial Organization (only individual)	Spatial Organization Physical and Social Landscape Elements Physical and Social Landscape Values Physical and Social Landscape Change (only in large group)

- Activities are needed to enhance participants' abilities to remember past experiences, memories, stories and physical landscape
- Language Barriers can include language as well as specialized terms. Participants can switch to their native language creating an understanding barrier for the researcher.
- The implementation duration varies for each method and group size.
- It takes additional effort to record, transcribe and analyze collected data
- Richness of Content includes gathered type of information, quantity and quality of information, quantitative or qualitative data. If the method covers all it has a rich content.

We defined parameters in different phases for comparison of the effectiveness of the community-based methods implementation. In the preparation phase the parameter was the effort to prepare survey questions. During the data collection phase the parameters included: flexibility to work with participants, flexibility to conduct the method, credible participants, group size dynamics, ability to recall past, language barrier and duration. In the data analysis phase, the effort to record and transcribe and richness of content were the parameters (see Table 3).

Table.3 Ease of use of each method compared to group size.

Phases	Parameters	Discussion		Survey	Oral History Interview			Photo Survey		PVR	Mapping	
		SG	LG	I	I	SG	LG	I	SG	I	I	LG
PREPARATION	*Effort to prepare questions*			Very High	Low	Low	Low	Medium	Medium			
DATA COLLECTION	*Flexibility to work with participants*	Low	Low	High	Low	Low	Low	Low	Low	Low	Low	Medium
	Flexibility to conduct the method	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	Medium
	Credible participants	High	High	High	Low	Medium	Medium	Medium	Medium	Medium	Medium	Very High
	Group Size Dynamics	Medium	High	Low	Low	Medium	High	Low	Medium	Low	Low	Very High
	Ability to recall past	Low	Low		High	Low	Low		Low	Low	High	Low
	Language Barrier	Low	Low		High	Low	Low			High	Medium	Low
	Duration of Method	Medium	Low	Very High	High	Medium	High	Medium	Medium	Low	Low	Medium
DATA ANALYSIS	*Effort to record and transcribe*			Medium	High	Very High	Very High	Medium	High	Low	High	High
	Richness of Content	Very High	Very High	Low	Low	Low	Low	Medium	Low	Very High	Low	Medium

LEGEND OF DIFFICULTY LEVEL	Low	Medium	High	Very High
	I: Individual	SG: Small Group		LG: Large Group

Table 3 shows the comparison of each methods in difficulty level of parameters. The difficulty level varies between methods and group sizes. The colors represent the difficulty level from lowest (green) to highest (red). Blank cells are non-applicable for the related parameters. Based on the table, we interpreted that even though there were practical difficulties during the data collection, rich content of information was collected. For example, the survey had a very high difficulty level in preparation phase and high difficulty level in data collection phase but we gathered information with rich content. On the other hand, the discussion method did not have a preparation phase and data collection phase was usually of low difficulty in both group sizes. But the data collected did not have richness of content. Oral history interview had low difficulty averages in first two phases. The effort to record and transcribe was the most challenging part, not a surprise in our experience, but this challenge did not prevent rich content collection.

In specific parameters, we found that smaller group discussion required less duration than large groups. Participants were more focused on the discussion in a small group. In survey method, the duration was expected to be complete during the community meeting. However, elderly participants needed eyeglasses to fill out survey questionnaires so they needed additional time and a later collection date. Group size dynamics in each method were more challenging in small and large groups compared to individual interactions.

Evaluation of the methods showed that using a combination of the community-based methods: discussion, survey, oral history interview, photo survey, photo-voice recording and mapping- has the power to produce effectiveness in documenting cultural landscapes The limitations for a particular method can be offset by another method. For instance, researchers need to be prepared to spend more time and effort in preparing questions for the survey unlike a less structured oral history interview. Table 4 shows that even though a method has practical difficulties during data collection, rich content can be collected. Surveys have a very high difficulty level during the preparation phase and data collection but data analysis is in low difficulty level. On the other hand, discussions do not have a significant preparation phase and data collection phase goes usually in low difficulty level in both group sizes. It also results in a low richness of content.

5   CONCLUSION

We aimed to evaluate the effectiveness of community participation methods in documenting cultural landscape elements, and to provide guidance for developing and implementing community based methods in cultural landscape studies. We implemented six community-based methods including discussion, survey, oral history interview, photo survey, photo-voice recording, and mapping to document physical and social landscape elements and perceptions of change in a geographic district. All methods were used in different group sizes - individual, small group and large group. Findikli, the district of Rize province in Turkey, was selected as a case study area since it has been experiencing cultural and natural heritage loss due to rapid landscape change.

The combination of methods provided more factual and perceptual information, in content and in quantity as there was a cross relationship between methods. The sequence of method implementation created a snowball effect for recruitment of participants. Interaction between methods, as well as quality of information. For example, discussions initiated participation in the survey. Oral history interviews provided more details survey questions. Surveys provided demographics of participants. Mapping activities and photo surveys illustrated information raised during the interviews and surveys. Photo-voice recordings provided additional photos to document and illustrate what was drawn during cognitive mappings.

Using the combination of methods provides high quality and quantity of information; more diversity in types of information. Sequencing each method from one to another supports and verifies information derived from different methods. By doing so, researchers collect more saturated data. This critique presents the benefits of using a set of methods. However, when the research is time or effort limited, researchers can use this evaluation to determine what method is more appropriate to collect an information in rich of content and how they conduct methods to obtain more information in high quality and quantity. For example, in our experience most of the data were collected by survey, oral history interview, photo survey and mapping and they complemented each other when we had a time limitation especially.

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