

Photo-elicitation as a Method of Assessing Village Needs for Extension Planning

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Abstract

Photo-elicitation is a method of gathering data from respondents who are asked to take photographs or critically examine and reflect on images taken by others to offer a more “native” view of often cross-cultural or inter-group experiences. This method was applied to determine what the residents of a village in China’s Hangzhou province saw as their community’s development priorities by asking them to take photographs of local scenes, characters and objects to depict their needs. Through their snapshots, they indicated the need to diversify their community’s economic base (currently limited to snake production and processing), the need for better transportation and for more markets for their products. On the other hand, the faculty and students of a university mandated to develop an extension force to serve the village’s agricultural needs indicated in a focus group that their rural clients were likely to clamor for more markets, lenient government policies, and educational opportunities. Examples of studies that have used this approach and the strengths and limitations of the photo-elicitation technique to assess village needs for extension planning are discussed.

Introduction

Agricultural communicators on international assignment often face a daunting problem: the language barrier. Often asked to undertake rapid rural appraisals to gather benchmark data for project development, they encounter language and other cultural difficulties that threaten the validity and reliability of their formative evaluation data. Some well-endowed projects can solicit the assistance of competent translators and interpreters on a sustained basis; others, however, are not so fortunate. Almost always, these quick appraisals, done through surveys and interviews, do not provide the necessary context to identified problems and offer too little about what people make of their own circumstances.

One of the ways by which communication planners and practitioners, ethnographers, anthropologists and other social scientists have dealt with language and other cultural “immersion” problems is to tap the rich data and multiple meanings offered by photographs and other visual devices. Drawn or taken by researchers, planners or local citizens who are usually the target beneficiaries of development efforts, these images have been used to elicit reactions and information concerning community life (i.e., Schwartz, 1989; Caldarola, 1985, Sampson-Cordle, 2001), immigrant concerns (i.e., Sustik, 1999; Gold, 2004), the use of rural and urban space (i.e., Quesnell, 1987), the concerns of refugee populations (i.e., Mathews et al., 2006), and organizational change (i.e., Buchanan, 1998), among others, that might otherwise have never become apparent. The technique has demonstrated several advantages, but in general, it uses images as “bridges between worlds that are culturally distinct” (Harper, 2002, p. 21).

Researchers from different social science fields have given this method of gathering data different

names—“visual ethnography” (Schwartz, 1989), “photo essays” (Sampson-Cordle, 2001), the “photographic research method” (Caldarola, 1985), “photo interviewing” (Tucker and Dempsey, 1991), “auto-photography” (Sustik, 1999) and “photofeedback,” among others. This technique, however, is now more popularly known as “photo-elicitation,” following the term first coined by photographer and researcher John Collier in 1957 (Harper, 2002).

Photo-elicitation “is based on the simple idea of inserting a photograph into a research interview” (Harper, 2001, p. 13). While most elicitation studies use photographs, the technique can be employed using paintings, cartoons, graffiti, public displays or any type of image. The approaches to elicitation studies also vary. In some cases, development planners and researchers examine available visual data or create their own images that they analyze to gain insights into their target communities. In other cases, subjects are asked to critically examine and reflect on the images taken by others to offer a more “native” and grounded view of development concerns and priorities. In rare cases, community participants photograph their own world with inexpensive automatic cameras to share and elaborate on their experiences.

There are apparent advantages to this latter approach because the personal orientation of the group under study guides the selection of the subject matter. Using photographs taken by participants as elicitation tools in an interview allows the researcher to enter the perceived world of local citizens. What emerges is a local visual documentary that permits a more direct presentation of the insiders’ narratives about themselves and their concerns. In other words, this method of collecting data enhances the possibility that the resultant discourse is grounded in the participants’ immediate world.

Photo-elicitation also enables a greater understanding of the informants’ environment emerging from their selection of, and commentary about, the images. Using photographs as the basis of interviews further enhances the reflections made about the context in which people’s lived experiences are revealed. Such a technique can thus be expected to empower respondents.

Photo-Elicitation in Agriculture and the Social Sciences

Although photo-elicitation is a contemporary qualitative approach based on image and narrative, there is a history that shows the evolving use of photographs as data by anthropologists and sociologists. Social scientists have used cameras as research tools almost since anthropology and sociology had been declared legitimate areas of study in the United States (Harper, 1988). Collier (1967), for example, found that photographs can provide a more efficient analysis of social settings, such as dwellings, “poverty pockets” and workplaces than can be obtained by using only oral or written descriptions. He observes that the photographs allowed researchers to move from a concrete idea to one that is more socially abstract in their discussion with respondents.

Harper (1987) describes the process he used in his own study as follows:

“In the photo-elicitation interview, the informant and the interviewer discuss the photographs the researcher has made of the setting, giving the interview a concrete point of reference. The researcher gains a phenomenological sense as the informant explains what the objects in the photograph mean, where they have come from, or developed from, and what elements may be missing . . . The individual being interviewed comes to a level of understanding, as would anyone confronted by a photographic study of his or her social world, that probably did not exist prior to the interview” (p. 25).

Other studies have also capitalized on this approach. For example, Bunster (1978) used Collier's (1967) work as a basic source in stimulating open-ended interviewing of working mothers in Lima, Peru. In this case, she used booklets of photographs compiled prior to the interviews to serve as discussion springboards. Curry (1986) applied the method to study the sociology of American sports, and Suchar and Rotenberg (1994) used photo-elicitation to examine the shared meanings about housing held by three different categories of residents in an urban Chicago neighborhood. Quesnell (1987) employed this approach to determine people's perceptions of development initiatives in Vermont while Clark-Ibanez (2004) used it to engage the children of south central Los Angeles in a series of conversations about their social world. Others (i.e., Mathews et al., 2006) took advantage of the approach to elicit the stories of young asylum seekers through photography, drawings, paintings and sand play. Beillin (2005) was able to recreate physical and social changes in a Midwest agricultural landscape by drawing on the residents' accounts of critical events in the community elicited by allowing them to examine old photographs. Crosscombe (2003) did the same to tease out stories about farming from dairy farmers.

Can this method be applied for more efficient problem identification especially in an international assignment? We set out to test this approach to identify, clarify and prioritize the pressing needs and concerns of a village in southeastern China.

Photo-elicitation in Community Problem Identification: A Test Case

Located in the coastal city of Hangzhou 180 km southeast of Shanghai, Zhejiang University was recently given a new mandate—to develop a rural extension system different from the state-run mechanism people have traditionally known. Since 1999, national policy makers have been gradually transferring the function and fiscal responsibility for extension to universities to stimulate the creation of free market enterprises in the countryside (Garnau et al., 1996). Accustomed to its usual dual function of teaching and research, ZU was suddenly thrust into the business of communicating with its rural constituents, and charged with developing a vibrant extension force.

Originally, policy makers had thought that the university's extension workers could simply relay the villagers' problems and concerns to officials who can respond to their needs. They quickly learned, however, that extension should serve as the conduit between scientists and the villages, and while agent advice based on sound research is important, the clients' ideas are just as valid in finding science-based answers to meet people's needs. ZU immediately recognized that it needed to augment its rural ties and its level of interaction with rural clients. Citizen input was needed to answer the following questions:

- (1) What do villagers see as their most pressing development needs?
- (2) What does the university, as the potential extension delivery entity, think the villagers see as their most pressing needs or development priorities?

Theoretical Framework

To determine whether the villagers and those charged with extending research results to them share the same views regarding the areas demanding the expertise of university scientists, the photo-elicitation technique was applied. For this test case, McLeod and Chaffee (1973) provided a theoretical framework useful in approaching and measuring the extent to which these two groups co-oriented with each other with respect to extension priorities.

The key assumption underlying the co-orientation approach is that a group's behavior is not based simply upon its members' private cognitive construction of the world; it is also a function of the

group's perception of the orientations held by other groups in the environment. A further assumption is that under certain conditions of interaction, the actual cognitions and perceptions of others will also affect people's behavior (McLeod & Chaffee, 1973). As such, the theory suggests that communication can bring about congruency, agreement, understanding and accuracy of perceptions about an object or issue between, for example, university extension agents and their clients if both parties ask the right questions and are sensitive to each other's goals.

The co-orientation model integrates three basic kinds of variables. Figure 1 illustrates how these three measures relate to the current test case. The first is congruency or the degree of similarity between a group's cognitions and its perception of the other group's understanding of a specific object or issue. The second, agreement, refers to the extent to which the two groups' orientation with respect to an object or issue is similar. These two variables are highly dependent on personal values, the products of numerous experiences, and are thus unlikely to be changed by communication actions alone. Therefore, neither congruency nor agreement makes for a satisfactory criterion for measuring the influence of communication acts. The third variable, accuracy, is "the extent to which one group's estimate of the other group's cognitions matches what the other group really does think" (McLeod & Chaffee, 1973, p. 47). Accuracy, therefore, seems an ideal criterion to measure because it is achievable theoretically through communication. Thus, this study set out to determine how two groups—the villagers and the university people—accurately perceived the development needs of a village.

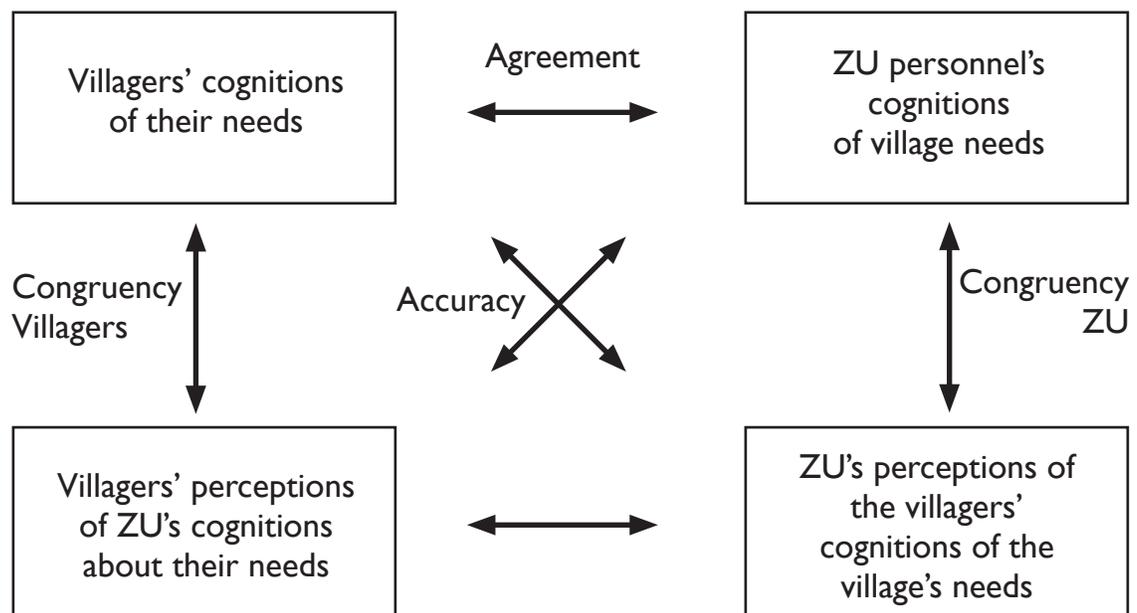


Figure 1. The co-orientation measurement model as applied to extension planning in China (Note. Adapted from Chaffee and McLeod, 1973.)

According to the co-orientation theory, groups who have a positive opinion of each other will, with increased contact, gradually come to agree more on topics of mutual relevance. Another expectation from the theory is that two groups are likely to hold different perceptions because they have differing roles, purposes, prior experiences, and communication potentials. Thus, one can expect that the perceived development priorities of a villager are not going to be the same as those of an extension agent who, more often than not, is a village "outsider." The broader objective of this study,

therefore, was to examine the extent to which university extension agents and their rural clients accurately identified village needs. Ascertaining the village's development needs from the point of view of its residents was done through photo-elicitation.

The first phase in an appraisal of needs involves finding out what people thought were the main problems and concerns to which extension should direct its efforts. While gathering the opinions of university constituents may not be a daunting task, how to get the perspective of villagers is a demanding undertaking, especially to non-natives and non-Chinese speakers.

The availability of inexpensive Polaroid™ (instant photography system) cameras fueled the idea that the villagers' commentaries could be elicited through the use of photographs they took themselves. The village participants in this needs exploration exercise were asked to take pictures of what they perceived as their most pressing development priorities. These photographs were then used as the focus of discussion, encouraging them to become the "teacher" by explaining to the researchers the images they took and what they meant. Essentially, these photographs served as the basis of further discussion about their concerns.

Harper (1988) points out that this approach was not intended to obtain images that are visually arresting, such as those seen in a documentary. In fact, he explains, the desire for visually arresting photographs stems from the "culture of the photographer" rather than the "culture of the photographed." The idea, rather, is to photograph objects and situations through the eyes of the villager. The method requires a "culturally neutral" eye—a difficult but exciting challenge for the interviewer—with the goal of obtaining information from the succeeding in-depth interviews with local "photographers."

By recording data, events and activities in a way that would convey a "feel" for the lives of the communities being studied, photo-elicitation was employed in this study as a means of shortening the gulf between the group under study and researchers whose own cultures and professional training can result in a different mental construct related to what was worthy of film. This follows the works of Preloran (1975) who used his films as an opening for dialogues with people he was studying in an effort to "give voice to those who had none" (p. 103). Film, then, became a part of the method for eliciting a conversation with a group of people about their day-to-day lives.

The Test Case

The study was conducted in a village located in DeQing prefecture (county) in Zhejiang province, located approximately 300 kilometers southwest of Shanghai. The village, categorized administratively as a "town and village enterprise," was a suitable study locale because nearly its entire population was involved in a common enterprise—snake production, processing and marketing. As such, it will be referred to here as Snake Village.

According to Huang (1998), gaining access to a village and ensuring the voluntary participation of villagers depended on following established protocols. This meant that the approval and support of officials and opinion leaders must be solicited first. To do so, the nature, purpose and process involved in the project must be thoroughly explained to the community authorities.

Because of their established presence in DaQing county, the government seat of Snake Village, ZU officials were instrumental in setting up meetings with the village officials, a difficult task considering that Chinese government officers are usually reticent to allow their constituents to be evaluated, particularly by researchers from free-market democracies whose government leaders are quick to point out China's human rights infractions.

Eight villagers were selected by the village heads to participate in this study. The research project

was explained to this purposive sample by the interpreter who also demonstrated how to load film and take pictures using Polaroid One-Step™ cameras. Each participant was given a roll of film with 20 exposures and was asked to return in two days with ten photographs representing what he or she considered to be the village's development priorities. The other ten exposures, they were told, were free for their own use. The participants were also promised 40 yuan (about US \$5.00) if they would discuss their photographs with the researchers.

Upon their return, the participating villagers were asked in private interviews to explain what each photograph represented using open-ended interview protocols. After this, the photographed concerns were placed into specific categories of needs.

Structured interviews with native informants allowed the researchers to understand ways by which they conceptualized and categorized elements in their own terms. The inquiry matrix included such questions as: "Tell me about this picture you've taken." "How would you describe that?" "What is happening in this photograph?" "What particular need does this picture represent?" The probes were structured and controlled for the initial information being sought, but information also emerged that allowed the researchers to gain additional insights about concerns the villagers perceived as most pressing.

Commenting on the photographs they took themselves allowed the participants an opportunity to further position comments within their own experiences and contexts. If the interviewee was able to regain or get in touch with perceptions held about village priorities, then the photo-elicitation process can be considered to have accomplished its task. In the qualitative research paradigm, data so grounded in the participants' personal contexts and experiences are considered more valid (Lindlof, 1995).

It should be noted that the community leaders were quite skeptical of the villagers' ability to participate in this exercise. They doubted whether villagers had the educational background or experience to understand its purpose. They also thought the villagers would be more intrigued with the camera and would place less emphasis on identifying their most pressing concerns.

Results and Discussion

The Locale: A Brief Economic History

The researchers first interviewed community leaders, including the village's Party secretary who offered a narrative that pointed to the remarkable success the village had scored over the past few years.

Snake Village, according to its Party chief, was once mired in extreme poverty. When the government encouraged free market trade and the establishment of village enterprises, the village decided to focus on value-added snake products. Rather than continuing its 15-year practice of first-level snake processing (raising and selling snakes), the leaders determined that refined snake processing would be more profitable. Ninety percent of Snake Village farmers were engaged in harvesting and processing four to five varieties of non-poisonous snakes for food, medicine, and cosmetics. The largest markets for live snakes were Hangzhou and Shanghai restaurants; snake venom and organs were processed into medicine and wine. Product prices were mostly dictated by Hangzhou and Shanghai because the snake producers have yet to expand to foreign markets. After engaging in value-added snake production for only four years, the Snake Village enterprise became one of the most profitable in the county.

The Party secretary was understandably skeptical about the study, demonstrably at a loss as to

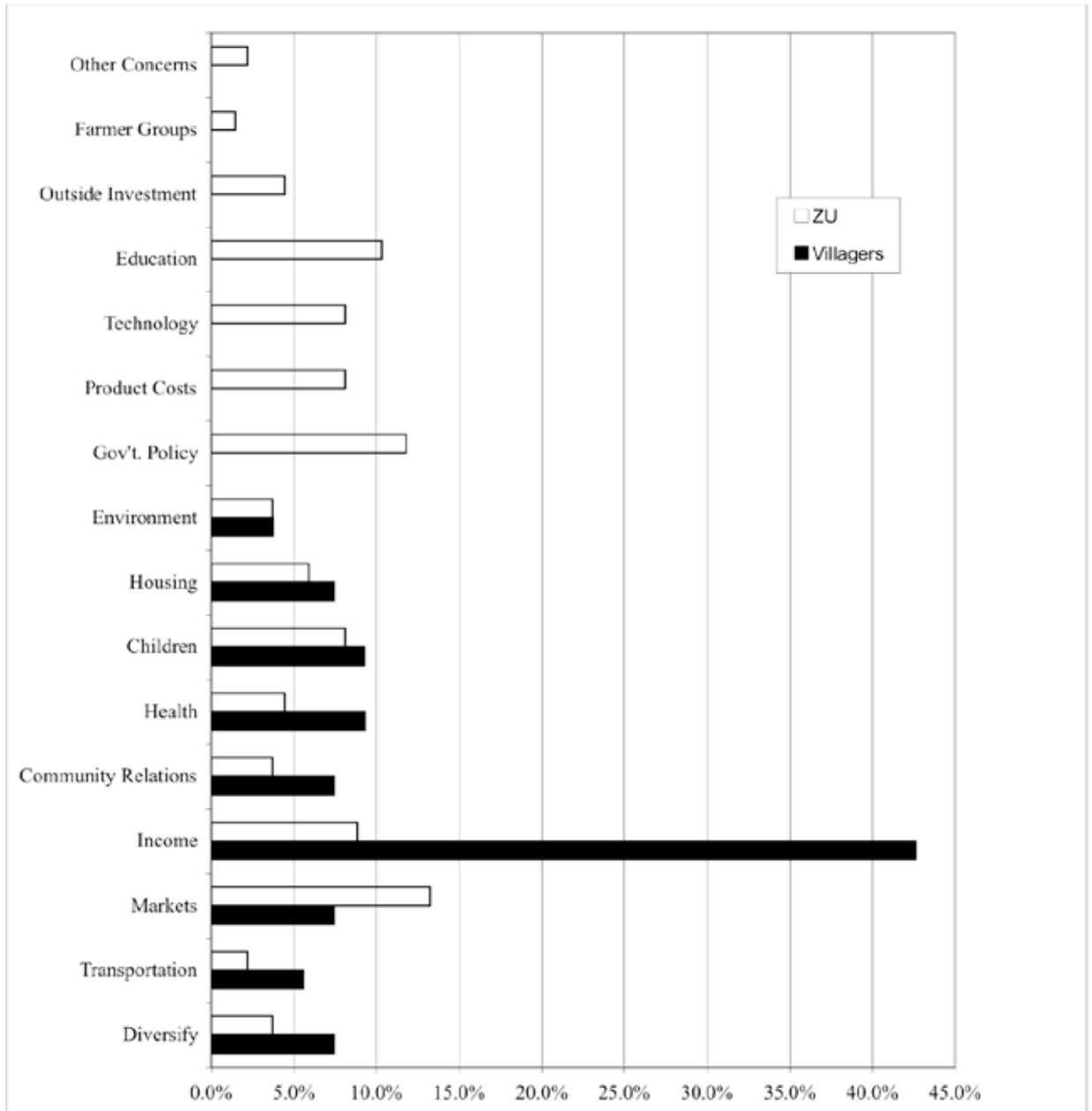


Figure 2. The perceived needs of snake village: A comparison of the villagers' and ZU faculty and students' responses

why the team would go to such lengths to understand village needs. He was sure his constituents would not understand, let alone have the skills to photograph, their concerns. Having been reassured that the study was not meant to assess the performance of government officials, he gave the team permission to proceed.

What the Villagers Actually Cared About

Eight people—seven men and a woman, 25 to 50 years old—took pictures and participated in interviews the following day. Assured that their photographs and responses would not be shared with other villagers, the eight were asked individually, with the aid of an interpreter, to explain what their photographs meant. Their development concerns fell under eleven broad categories (Figure 2).

The need to diversify their economic base topped the list of villagers' development priorities. A photographic depiction of this primary concern is shown in Figure 3. This development concern was followed by better transportation (Figure 4), more markets (Figure 5), and the desire to increase personal incomes (Figure 6), in that order. Better community relations, more adequate health care, and a concern for their children's future (Figure 7) were categories that occupied the middle part of their development priority list. Improved housing (Figure 8), environmental protection (Figure 9) and care for the elderly (Figure 10) completed their needs inventory.



Figure 3. A lone fisherman at work represents a villager's perceived need for the community to diversify its economic activities.



Figure 4. Snakes and snake products can be marketed more efficiently with better means of transportation. This cargo raft represents a villager's perceived need for improved transportation systems.



Figure 5. Two vendors in the background have arrived to purchase snakes, a representation of "more markets" as a major concern.



Figure 6. A shrimp harvester earns more than a snake farmer, according to a villager for whom this photograph means the need for higher incomes.



Figure 7. Pre-school children at a day-care center illustrate child care as an important concern.



Figure 8. A new apartment complex outside the village represents the desire for better housing.



Figure 9. Environmental protection as a priority area comes up in this picture of pipes for the new village water system.



Figure 10. This village grand lady turns 100 years old in a couple of months. She symbolizes to a villager the need for better elderly care.

The disparity between the number of photographs depicting each of the above categories and the priority assigned to each may be noteworthy. While a majority (42%) of the photographs fit into the “increased income” category, the villagers deemed the category as only fourth in importance, following diversification, transportation, and improved markets. Several factors may have contributed to this priority list. First, it is possible that some nuances in responses may have been lost in translation. The villagers also may have found it difficult to find objects in their immediate environment that depicted some of their concerns. Also, three of the four photographs that fell under “planning for diversification” were taken by a participant who helped oversee the village government. Used to government-directed initiatives, the villagers may well have looked up to him for leadership in determining how to prioritize their categories of need.

Comparing Villagers' Priorities and What ZU Officials Perceived Villagers Cared About

The research team then moved to the ZU campus to determine what university constituents thought were the most important issues confronting Snake Village. Eight graduate students in programs related to rural development (i.e., agricultural economics, finance, and rural sociology and rural development) and six professors with expertise in horticulture, agronomy and agricultural economics agreed to participate in a focus group that discussed what they thought were the main development concerns of Snake Village residents. Their responses were then compared to those of their village counterparts to determine if both groups agreed on development priority areas. Because of unequal sample sizes, the percentages of total group responses falling under each identified need category were compared (Figure 2). It was expected that incongruent responses could serve to clarify the development priorities of the emerging extension program.

The results showed that while most of the villagers' photographs (42.6%) indicated a desire for increased income, their university counterparts assumed that the villagers would clamor for more markets (13.2%), more lenient government policies (11.8%), and for better education (10.3%). In fact, only 8.8% of the ZU officials' responses accurately pinpointed the farmers' expressed need for improved incomes. The university constituents' three most cited needs, however, indicated strategies to boost local incomes.

The two groups' responses were most closely aligned in the categories of "health," the "future of children" and "environmental protection." A significant number of ZU officials' answers, mostly falling under the categories of "government policies," "production costs," "technology," and "education," were not even identified as development concerns by the villagers.

Figure 2 illustrates that the villagers' top category, "diversification," was mentioned only five times by the ZU participants. Evidently, the officials had ignored the second and last categories in the village residents' list, "transportation" and "care of elderly parents," respectively.

Clearly, the university constituents produced development priorities different from those identified by the villagers themselves. Specifically, the university focus group participants' list included items they consider necessary for a village to become and remain economically stable. Indeed, the university prioritization scheme clearly identified the areas for which the villagers might need technical assistance: government policies, production costs, technology cost/benefit, environmental issues, investments, credit, and the creation of viable farmers' organizations, among others.

In their studies of dyadic co-orientation, McLeod and Chaffee (1973) point out that two individuals or groups should be expected to hold different perceptions of the same object or issue given their different roles, purposes, experiences, and communication potentials. As such, the nascent extension efforts in China must first understand the importance of maintaining continuous dialogue with rural clients to ease the countryside's transition to a free market economy. Given limited resources, it will be important for the university to pay attention to program planning and delivery based on what their rural constituents truly care about.

Conclusion

The use of photo-elicitation as a research tool in this study proved productive and rewarding. The researchers won the confidence of villagers by entrusting them with a camera and assuming they would return in two days with the cameras and photographs in hand. The villagers were particularly fascinated with the cameras' instant film processing capability. Their incentives for participating included enough film to keep ten photographs for their personal use, along with a cash payment. By allowing villagers to identify and explain their concerns in their own terms, the researchers were able to

encourage dialogue in a way that would not have been possible through survey interview techniques. In fact, it can be said that the method gave researchers access to the village because the cooperation of county and village leaders stemmed in large part from their curiosity about how photographs can be used to obtain in-depth information.

The photographs, rather than direct questions, became the focus of discussion and made sense to the interviewers only through the villagers' explanations and elaborations. More important, the villagers' animated responses indicated they reveled in the opportunity to verbalize their thinking about the economic and social welfare of their community, a task traditionally left to Party leaders. The villagers volunteered that the method allowed for their first organized experience in strategic development planning. The study, in effect, set the stage for continuing dialogue between the villagers and ZU extension agents that may, in turn, lead to the shared governance of extension activities.

The photo-elicitation method did not allow the researchers to see the world the way the actors did necessarily, but rather permitted the sensitive translation of the social situation being studied. Even the villagers who took the photographs cannot be said to have captured reality on film, but have instead constructed a set of images consistent with their view of what ails their community and the what areas are ripe for improvement. Nevertheless, by using their own photographs to ask about their environment, the method uncovered and expanded on the meanings they hold for the villagers who took them. The use of photographs also elicited more grounded verbal commentary than one might get in a traditional question-and-answer type of survey.

Not all village participants were good photographers, but all revealed more about themselves and their environment through the photographs. This study showed that intensive interviewing using photographs as starting points has the potential to be applied to a number of other data gathering situations for planning.

While most of the villagers' photographs indicated a desire for increased income, their university counterparts assumed the villagers would be looking for more markets, lenient government policies, and education. In fact, only a small percentage of the ZU responses overlapped with the farmers' expressed desire for improved incomes. The two groups' responses were most closely aligned in the categories of "health," the "future of children" and "environmental protection." The villagers' top need category, "diversification," was mentioned only five times by ZU participants. Neither "transportation" nor "care of elderly parents" appeared in the university participants' answers. To the university constituents, "government policies," "production costs," "technology," and "education" stood out as the most important village concern although these issues were not identified by the villagers themselves.

Qualitative research allows for deeper descriptive narratives, but no generalizations relative to the larger population can be made from a small sample size. Given recent Chinese history, issues of trust and confidentiality of responses were also of concern to the respondents. There were also limitations due to working within a community that is ethnically and linguistically different from those of the researchers. All interviews were done with the aid of a translator. As such, nuances in responses may have been lost or extremely compromised. At times, the researchers did not feel that the images had been successfully translated into words. The researchers were also constrained by time limitations imposed by their hosts. More in-depth interviews would have shed further light on the genesis of the need priorities arrived at by the villagers.

Aware that familiar objects or symbols may be inadequate to represent a concern, it must be acknowledged that some visual experiences may exist that defy verbal description, and that everything one can verbalize cannot necessarily be recorded as a visual symbol.

Despite the limitations, the study (1) provided an opportunity for villagers to consider their collective future, (2) encouraged the nascent ZU extension force to give some thought to what villagers perceive to be their urgent development needs, and (3) enabled the researchers to examine how the village and the university co-oriented with each other, leading to a set of recommendations for Zhejiang University to consider as it embarks on an era of enhanced engagement with its rural clients.

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