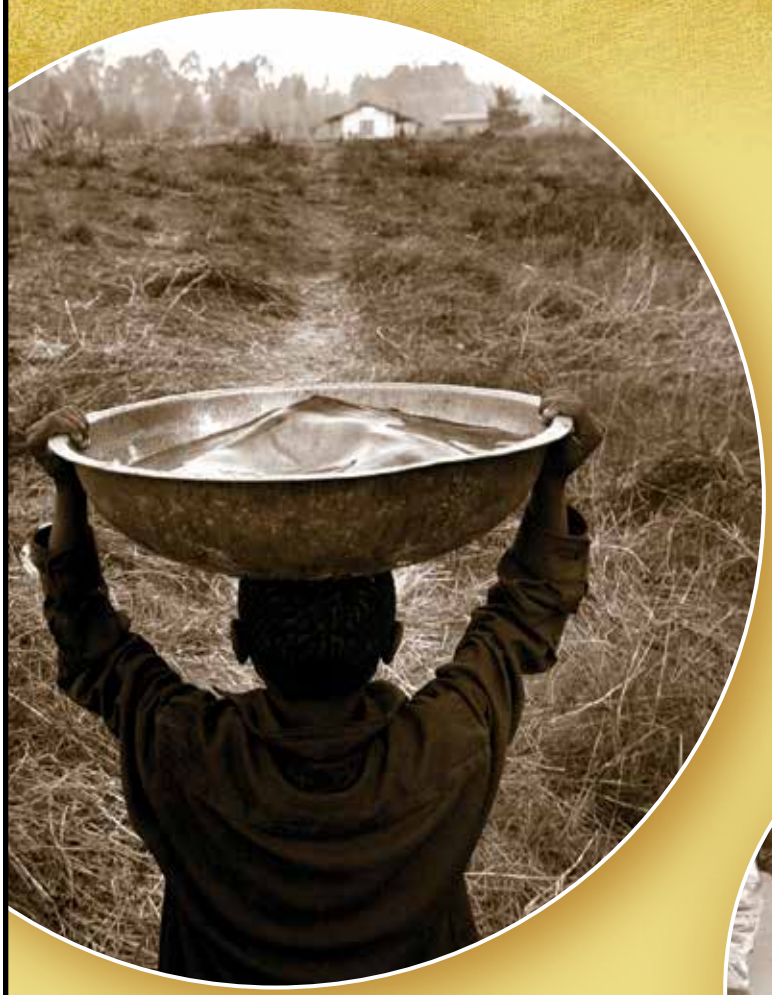
Evaluation of a Community-Based Response to the Needs of Orphaned and Vulnerable Children

Godfrey's Children Center | Idweli, Tanzania – East Africa



LUNDY FOUNDATION | MAY 2007

Evaluation Team

Project Director
Victor Dukay, Ph.D., M.B.A. — President, Lundy Foundation/U.S.

Co-principal Investigators
Victor Dukay, Ph.D., M.B.A. — President, Lundy Foundation/U.S.

Harryl Hollingsworth, M.A. — Project Manager, Lundy Foundation/U.S.

Dr. Sylvia Kaaya — Head of Department of Psychiatry and Mental Health, Muhimbili University College of Health Sciences — Dar es Salaam/Tanzania

Carl Larson, Ph.D. — Professor (Ret.), Department of Human Communication Studies, University of Denver/U.S.

Claude Mellins, Ph.D. — Associate Professor of Clinical Psychology, Columbia University/U.S.

Jennifer Thompson, Ph.D. — Consultant in the areas of conflict, culture and communication/U.S.

Allan Wallis, Ph.D. — Associate Professor of Public Policy, University of Colorado at Denver/U.S.

In-country (Tanzania) Project Coordinator
Furaha Nsemwa

Evaluation Design Consultants
Dr. Rehabiamu Mahenge — Psychiatrist, Head of Department, Mbeya Consultant Hospital/Tanzania

Stephanie Marhefka, Ph.D. — NIMH Postdoctoral Fellow/Behavioral Sciences Research in HIV Infection/Columbia University/U.S.

Rose Mwaipopo, Ph.D. — Social anthropologist and lecturer, University of Dar es Salaam/Tanzania

Dr. Fausta Philip — Clinical Psychiatry, Department of Pediatrics and Child Health, Muhimbili National Hospital/Tanzania

Data Analysts
Laurie Larson, M.S.S. — Qualitative Data Analyst, OMNI Institute/U.S.

Dorian Traube, Ph.D. — Quantitative Data Analyst, Assistant Professor, University of Southern California, School of Social Work/U.S.

Medical Consultants
Dr. Francis Mhimbira — Resident, Mbeya Consultant Hospital/Tanzania

Dr. Peter Kwita — Idweli Physician

Fieldwork Coordinator
Vivian Bashemererwa, M.A.

Fieldwork Assistants
Mwanaisha Juma

Jerry Kapungu

Frida Kyando

Elizabeth Mbando

Redempta Mlingi

Andindile Jobu Mwalukosya

Ethnographer
David Ipyana Mwaipopo, M.A.

Translation Coordinator
Noel Kilonzo

Primary Funder
Rockefeller Foundation
Dr. Pathmanathan Naidoo — Former Associate Director (Kenya) Health Equity

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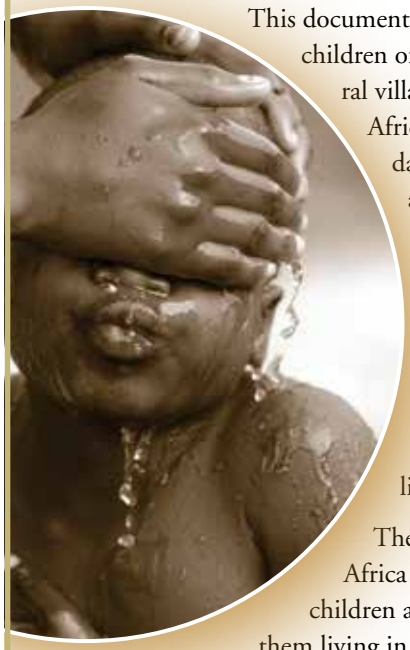


This document is dedicated to the children of Idweli, a small rural village in Tanzania, East Africa. The Lundy Foundation has been part of an international team of non-governmental organizations (NGOs) that has helped build a children's center to house, nourish and educate many orphaned and vulnerable children living in the village.

The future of sub-Saharan Africa is in the hands of these children and millions more like them living in villages that weave the region's social fabric. Theirs is a future concealed in uncertainty, insecurity and institutionalized skepticism. Likewise, it is a future that compels the urgent and sustained investment of public and private resources — not merely as acts of compassion, but to forestall the region's descent into chaos and unspeakable human misery for generations to come.

It falls to children growing up in thousands of AIDS-ravaged African villages to design and build 21st century Africa. It is hard to imagine a challenge so daunting in the best of circumstances. But there is ample evidence in recent history that civilizations are resilient…that over a single generation, nations and entire global regions can recover from devastation caused by disease, poverty, natural disasters and the man-made disaster of failed ideology. Hope is hard to see in statistics. To find it in East Africa, you must look into a child's eyes. It is a natural resource that renews itself over and over again, but it is not inexhaustible.

The reason for optimism lies within the social capital that is intrinsic in East African village culture. Social capital has been a strong medium in supporting families and children. However, the AIDS pandemic in Africa has strained traditional village culture beyond its ability to adapt. Historically, orphaned children have been taken into other village families. But the sheer number of AIDS orphans has overwhelmed villages, plunging the children themselves into abysmal circumstances and their fellow villagers into a state of helplessness and resignation.

From the outset, the Lundy Foundation has taken part in this intervention with the strong conviction that the people most affected by a problem should determine how to solve the problem — in this case, determine how best to address the needs of AIDS orphans. We came to Idweli willing to help, but without a preconceived solution. The solution would come from the children themselves. We were there to help facilitate the identification of the problem and to hear potential solutions articulated by the people who would live with them, and indeed be responsible for their success or failure.

In those early conversations, I watched young children — some living with their families, some orphans without support — sitting side by side, talking, giggling and demonstrating the courage to speak up. The spirit of solidarity among the children was deeply moving, and it has supplied me and the Lundy Foundation team with a vast reserve of determination and energy for our work, even at the most challenging moments.

The motivation behind this work deserves further explanation. This is a mission from the heart. My personal connection to the orphans of Africa starts with the loss of my own parents as an adolescent. I know firsthand that for a child who loses a parent, something will be missing forever. When my parents died, I was surrounded by loving people, a caring community and more than sufficient resources to support my healthy maturation. I went on to succeed in academia and business; today, I am able to pursue challenging philanthropic ventures. One of them has

Preface

been to help a few of Africa's orphans enjoy a small fraction of the advantages I had, in the hope that they will have a chance to rise above survival; lead successful lives; and contribute to their families, their villages and their nations.

The other significant factor in choosing this work is based on earlier collaborative initiatives of the Lundy Foundation, in particular, developing and supporting community-based processes in response to the challenges presented by the HIV/AIDS epidemic. Informed by earlier initiatives, our theory of change is based on the belief that *communities in crisis are the best qualified to determine what change is needed, how it will be created and how these communities will organize and accept responsibility for it.*

The future of a devastated Africa is, in part, dependent on the generosity of resource-rich nations to offer medicine, technology, trained personnel, logistical expertise and volunteers. The stakeholders in the future of sub-Saharan Africa are as diverse as they are numerous. The stakes are staggeringly high and the available resources are woefully insufficient. Several levels of intervention are under way simultaneously:

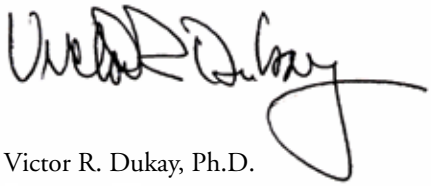
- Care for the sick and treatment for the infected
- Prevention activities to slow and eventually halt HIV's spread
- Care for the orphans and others left behind by those who have died

The problem of caring for Africa's orphaned children receives the least attention and the fewest resources. But over the long term, it may be the most critical form of intervention of all. Ensuring that food, shelter, medical care, education and psychological support are provided is vitally important for the well-being of these children and the villages where they live. It is my hope that this evaluation will stimulate interest in this much-needed third level of intervention.

Based on the results reported in this study, we believe that a powerful fourth tier of intervention can be delivered simultaneously: *strengthening the capacity of sub-Saharan Africans to rebuild their region, person by person and village by village.* As international organizations bring relief to these areas, we cannot overstate the importance of listening to the people, understanding the context of their lives and helping them meet their immediate needs in ways that develop sustainable social capital.

The Lundy Foundation takes pride in contributing new knowledge to the relatively unexplored area of child welfare among Africa's orphaned and vulnerable children. We hope that what we have to share will magnify the impact of relief and rebuilding efforts under way now and in the future. What this region will become depends far more on what the people who live there decide for themselves, individually and collectively.

And it starts with the children who are growing up in Africa today. May they prosper.



Victor R. Dukay, Ph.D.
President – Lundy Foundation

Senior Team Members

Victor Dukay, Ph.D., M.B.A., President and Project Director, founded the Lundy Foundation, a tax-exempt 501(c)(3) public operating charity based in Denver, Colorado, in 1991. The Lundy Foundation supports the building of collaborative leadership and the strengthening of organizational capacity in non-profits seeking to meet the social challenges of our changing world. Dr. Dukay formerly served as president and chief executive officer of the ALTUS Holding Group, a provider of executive jet leasing services. Dr. Dukay's extensive experience in the aviation industry includes consulting on equity financing and leveraged buyouts of aviation-related companies and negotiating corporate acquisitions. Dr. Dukay is a graduate of Notre Dame University, where he majored in economics. He received his M.B.A., M.A. and Ph.D. (Human Communications) from the University of Denver. He has twice received the University of Denver's annual award for Contributions to the Improvement of Teamwork and Collaboration.

Harryl Hollingsworth, M.A., Project Manager and Co-Principal Investigator, is an instructional design specialist and writer whose areas of expertise include instructional design and development, needs assessment, training, evaluation, distance learning and grant writing. For the Mayor's Office of Denver, Colorado, she conducted a six-county needs assessment to determine the housing and services needs for people living with HIV/AIDS and was responsible for survey design and implementation, focus group facilitation, logistics management and development of the final report. She recently developed a curriculum for the Centers for Disease Control and Prevention (CDC), focusing on hepatitis prevention, treatment and counseling within the public health sector.

Dr. Sylvia Kaaya, Co-Principal Investigator, serves as the head of the Department of Psychiatry and Mental Health, Muhimbili University College of Health Sciences (Dar es Salaam, Tanzania-East Africa). Dr. Kaaya holds a Doctor of Medicine, Master of Science in Medicine and a Diploma in Psychiatry. Supported by Carnegie Foundation grants, she has completed two fellowship programs in health and behavior through Harvard Medical School. Areas of expertise include epidemiology, adolescent sexuality, biostatistics and health services research. She is a member of the Advisory Committee of the National Mental Health Programme (Tanzania), secretary of the Social Science and Medicine Programme of the University of Dar es Salaam, and serves as a representative of the academic board in the Academic Appointments Committee. Dr. Kaaya is a member of the Medical Association of Tanzania as well as a founding member and treasurer of the Mental Health Association of Tanzania.

Senior Team Members

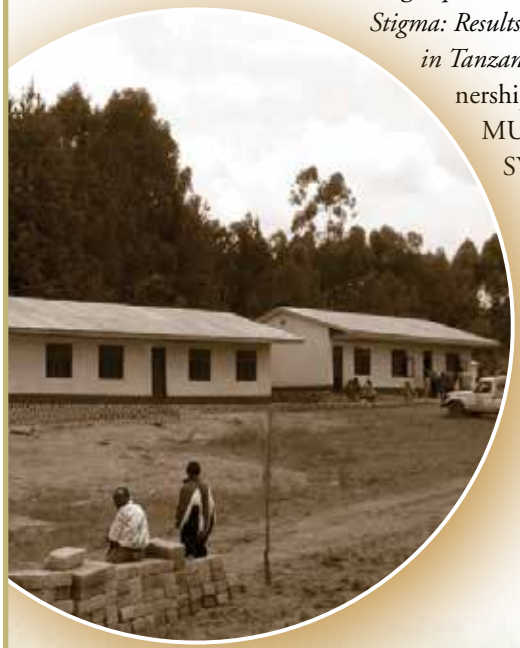
Carl Larson, Ph.D., Co-Principal Investigator, is a retired professor of human communication studies and past dean of Social Sciences at the University of Denver. He is an expert in evaluative methodology, as well as a recognized authority on teamwork and collaboration, frequently consulting with private and public sector organizations, including Baxter Healthcare, Merrill Lynch, NASA, the Federal Bureau of Investigation, the Environmental Protection Agency and more than 50 others. Dr. Larson's research with children includes two ongoing projects: One involves nurse home visitations to develop parenting and life-management skills for young, low-income, first-time mothers. The research examines the stakeholder collaboration processes in 16 communities and the influences of these processes on the success of the programs. The second involves early childhood classes teaching socially adaptive behaviors to children. This research also is focused on stakeholder collaboration as it influences program success. Both studies are supported by a Denver-based organization of private citizens, Invest In Kids. He is the author of seven books and numerous professional articles on communication, including his most recent book entitled, *When Teams Work Best*, published by Sage Publications in 2001. His book, *Collaborative Leadership — How Citizens and Civic Leaders Can Make a Difference* (with David Chrislip), published by Jossey-Bass in 1994, reports research on successful collaborative projects and their leadership.

Claude Mellins, Ph.D., Co-Principal Investigator, is an associate professor of clinical psychology, Departments of Psychiatry and Sociomedical Sciences, Columbia University, New York, New York. Dr. Mellins has devoted her research career and clinical efforts to addressing the health and mental health care needs of children, adults and families affected by HIV, poverty and substance abuse. She co-founded the Special Needs Clinic (SNC) at New York Presbyterian Hospital in 1992, one of the first and largest mental health clinics for children and families infected or affected by HIV in the United States. Dr. Mellins' research, informed by the SNC, has focused on identifying mental health needs of families affected by maternal and pediatric HIV. Most relevant, Dr. Mellins has been the principal investigator of several foundation and NIMH-funded research projects studying mental health and risk in HIV+ and affected youth, including *Risky Sexual and Drug Use Behavior in Early Adolescents with HIV+ Mothers*; *Risk and Resilience in Youth with HIV+ Mothers*; and, with Drs. Elaine Abrams and Mary McKay, *Mental Health and Risk in HIV+ Youth and Seroreverters*. Dr. Mellins is also on the scientific leadership committee for the Pediatric HIV/AIDS Cohort Study, a federally funded multi-site study of perinatally HIV-exposed children, and a co-principal investigator on *CHAMP+: Supporting the Needs of Perinatally HIV-infected Youth*. Work from all of these studies has resulted in publication in more than 40 scientific journals as well as chapters in academic books.

Senior Team Members

Furaha Nsemwa, In-country Project Coordinator (Tanzania-East Africa), serves on the board of directors of Godfrey's Children, a Tanzanian youth-organized NGO focusing on the welfare of orphaned and vulnerable children. Mr. Nsemwa coordinated the hiring of Tanzanian evaluation team members, translation of survey instruments, and financial record-keeping for the evaluation project. He has served as a national youth member of parliament where he represented the interests of children. He recently graduated with a diploma in accounting from the Institute of Finance Management (Dar es Salaam) and is currently working on a post-graduate diploma in finance.

Dr. Fausta Philip, Senior Team Member, is a psychiatrist at Muhimbili National Hospital, Dar es Salaam, Tanzania, where she focuses on clinical work with children and adolescents. Dr. Philip holds a Doctor of Medicine and a M.Med in psychiatry. Dr. Philip served as principal investigator in developing the *Working Report Measuring HIV Stigma: Results of a Field Test in Tanzania,* in partnership with ICRW, MUCHS and SYNERGY.



Jennifer Thompson, Ph.D., Co-Principal Investigator, is an expert in human communication studies with an emphasis in intercultural, interpersonal and family communication, and negotiation and conflict resolution. She has taught classes in these areas of study at the University of Denver, The Women's College at the University of Denver and the University of Colorado, Boulder. Her research focuses on intercultural awareness and the ways in which members of cultural groups make sense of their lives in changing social and contextual milieus. Dr. Thompson is a graduate of the University of Denver. Her research includes an appointment as Visiting Research Assistant–Department of Languages, Linguistics and Culture; Birkbeck College, University of London, where she explored the intercultural friendships of adolescents. Dr. Thompson with Dr. Mary Jane Collier presented *Adaptation among Adolescent Friends: Contextual Cultural Identity Co-Construction* at the International Conference of Language and Social Psychology in Ottawa, Canada.

Allan Wallis, Ph.D., Co-Principal Investigator, is associate professor of public policy at the Graduate School of Public Affairs, University of Colorado at Denver, where he directs the concentration on local governments and teaches courses on leadership and ethics, urban social problems, urban politics and growth management. He has served as interim director of the Wirth Chair in Sustainable Environmental and Community Development, director of the Ph.D. program in public affairs and as director of research for the National Civic League. Dr. Wallis facilitated the development of a comprehensive HIV/AIDS Service Plan for the State of Colorado and the Denver metropolitan area, as well as the Colorado Comprehensive Asthma Plan. He also was co-principal investigator in developing a handbook for conducting needs assessments in Colorado for those infected and affected by HIV/AIDS.

Executive Summary

The Challenge. Over 80% of the world's 15 million AIDS orphans are concentrated in sub-Saharan Africa.[1] By 2010 there may be as many as 18 million HIV/AIDS orphans in that region.[2] In the poorest countries with the highest infection rates, AIDS is projected to result in a two-thirds decline in gross domestic product within two decades.[3] The poorest households in these countries are currently suffering an estimated 20% decline in annual income.[4] Yet many of these same households are assumed to be absorbing a growing population of orphans.

HIV/AIDS orphans, especially from poorer families, are more likely to be malnourished, of shorter stature and to achieve lower educational attainment.[5] Their childhoods will be further eroded by earlier entry into the labor force at lower wages. The kinds of adults and parents they themselves become will affect the future economic, social and political development of their countries and of the region.

Ironically, when disasters of great magnitude hit suddenly, the world quickly mobilizes in response — the tsunami of 2004 that killed 230,000 brought pledges of $13 billion USD in aid[6] — while the decades-long cumulative toll of AIDS, and its ripple effects now being felt across generations, are not attracting similar concern. To the world, observes Archbishop Desmond Tutu, "The unfolding tragedy is barely visible."[7]

There are no quick or easy ways to respond to the magnitude of the culture-transforming HIV/AIDS orphan crisis. Affected communities, nations and international donors are challenged to find new collaborative processes for decision making along with innovative solutions that can be structurally integrated into the societies they serve.

The Response. The typical manner of caring for orphaned and vulnerable children (OVC) in sub-Saharan Africa is for extended family members, most often aunts and uncles, to take the children in. But the traditional safety net of many societies is frayed and failing.[8] Today, more often it is grandmothers — who had expected to receive support in old age from their own children — who are now having to raise their grandchildren. Children with no available family members are raising each other, often living in the street and turning to the sex trade in order to survive.[9] The alternative of placing OVC in orphanages is widely regarded as too costly and often injurious to children. When necessary, critics suggest that institutionalization be employed only for short-term support.[10]

As an alternative to either family placements or institutionalization, an increasing number of *hybrid* or community-based responses are being developed. These hybrid alternatives are often outgrowths of collaborations between one or more non-governmental organizations (NGOs) and local communities. Advocates believe that such collaborations help "inspire community ownership and build community strength."[11] They assert that "problems are best addressed when the people directly involved in a situation develop their own solutions."[12]

Although community-based solutions promise flexibility and responsiveness to local needs and capacities, a great deal of variation in outcomes is generated; therefore, objective evaluation of a program's effectiveness is essential. Through evaluation, the best of emerging practices can be identified, thus providing a foundation for replication of the most effective planning processes and solutions.

The Idweli Experiment. Throughout Tanzania, approximately 12% of all children are orphans — half of those as a result of HIV/AIDS.[13] Rural areas such as Idweli generally have lower HIV prevalence rates than urban areas. However, the unique location of Idweli on a major long-distance truck route and in a region where HIV prevalence rates are twice the national rate suggests the likelihood of a higher percentage of orphans.[14] The village of Idweli, near the city of Mbeya in southwestern Tanzania, has an estimated population of 2,500. Approximately 40% of its children are orphans — many orphaned by HIV/AIDS. By 2000, it was clear to many in the village that a community-wide response to the problems of orphans was necessary.

Idweli's response to the needs of OVC was unusual in two important ways: It involved collaboration and an inclusive participatory process. First, the decision to respond came from a small group of young village men who, through an acquaintance attending a U.S. university, influenced the director of a U.S.-based NGO (Africa Bridge) to facilitate a series of meetings in the village. This collaboration helped combine unique resources and talents to identify the needs of Idweli's children. Second, a process radically different from village tradition was employed for planning and decision making. The process was suggested by Africa Bridge and strongly supported by the village chief. That process brought men, women and children of the village together as equals in making decisions.

With an idea that originated in the village, and a process that was open and engaging, villagers willingly committed their support to the ensuing project. A collaboration was formed between Africa Bridge, Godfrey's Children (the local Tanzanian NGO formed by the village men who first sought to help their village orphans) and the Lundy Foundation (a U.S.-based NGO) whose director was present at the village meetings. Working together with villagers, planning and construction of the children's center was soon under way.

Villagers contributed land, cleared it, made bricks and helped build the Godfrey's Children Center, which opened in May 2005 as a community-based residential facility that is home to more than 50 of the village's neediest orphans. Since the Center is part of the village, children continue to attend the local school and visit with family members on weekends. Because the Center also offers preschool and after-school programs open to all of Idweli's children, it has become further integrated into the life of the village.

With financial support from the Rockefeller Foundation, a team of Tanzanian and U.S.-based social scientists was assembled in August 2005 to design and conduct an evaluation of the Center. Very little scientific evaluation has been conducted anywhere to measure the well-being of orphans living in an environment such as Godfrey's Children Center, as compared to the well-being of family-placed and parented children. The evaluation project has two interrelated objectives: first, to evaluate the Center's impact on the well-being of Idweli's most vulnerable children; and second, to develop and implement effective and culturally appropriate methods for evaluating the well-being of OVC in a rural East African setting.

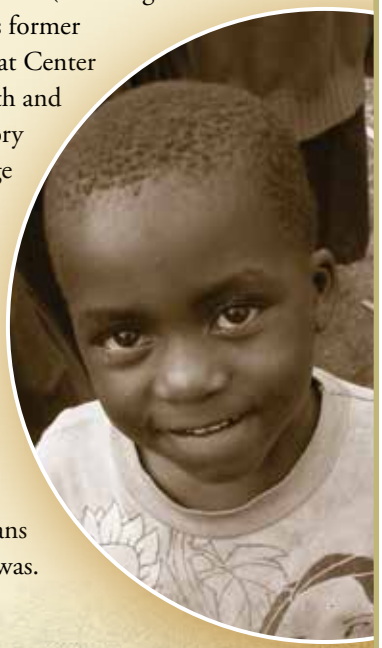
Key Evaluation Findings

The Idweli evaluation employed a combination of quantitative and qualitative instruments to evaluate Godfrey's Children Center through three lenses: psychosocial, physical and socioeconomic. Through the psychosocial lens, the evaluation looks at the orphans' psychological well-being and social integration; through the physical lens, it looks at their health; and through the socioeconomic lens, it looks at the social and fiscal costs of the support Center orphans are receiving and whether or not this support can be sustained.

Given the timing of funding for program evaluation and the significant training needs, as well as other issues involved in conducting cross-cultural research, data collection did not begin until after the Center had been operating for eight months, and it was, therefore, not possible to conduct a pre-/post-analysis of differences in the well-being of Center orphans. Instead, the research team analyzed data from Center orphans as compared to data gathered from three other sample groups — village orphans, village non-orphans, and children from households receiving microfinance loans.

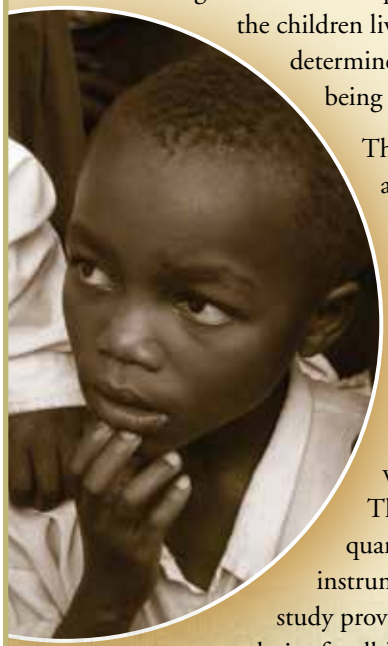
Findings from the evaluation suggest that, at least in the short term, children living at the Center (i.e., in a residential care facility within their own community) are doing as well — and in some domains, significantly better — on measures of psychological, social, nutritional and educational well-being as compared to other village children. Key findings of the study include the following:

- Regarding *psychosocial* well-being: On a standardized measure of depression, orphans living at the Center reported significantly fewer symptoms of depression than either orphans living in the village or children living with both parents; and there are no differences among the four children's sample groups in terms of number of people they can turn to for social support. Interview and focus group data suggest that rather than being stigmatized, Center orphans are envied by many of the other village children. In qualitative interviews, the Center children are significantly more likely to express a positive sense of well-being and a greater liking for school. Indeed, their school attendance is comparable to the other sample groups except for village orphans, who have a poorer record of attendance. When school performance is measured by terminal exams, there is a marginally significant difference between groups, with Center orphans scoring slightly higher than the other groups. Center orphans see the possibility of a hopeful future for themselves, specifically through education, and they are told frequently that they have the power to move themselves into that future.
- Regarding *physical* well-being: On a standardized malnutrition index, there are no significant differences between Center orphans and the other sample groups, despite the fact that Center children were originally selected as the village's neediest children. Healthcare providers (the village physician and the Center's former dispensary nurse) agree that Center children are in better health and have fewer upper respiratory problems than other village children. Interviews with village caregivers and parents of non-Center children indicated that Center orphans appear to be better taken care of than village orphans and expressed the belief that the ability of the village to care for its orphans is not as strong as it once was.



- Regarding *sustainability:* The Center appears to be becoming more socially integrated into the life of the village, with Center children spending more time with village families and village children attending preschool and after-school classes at the Center. Village caregivers and parents of non-Center children expressed continued strong support for the Center. Regarding long-term economic sustainability, the Center will likely require ongoing support from external sources. Although the village itself may be able to contribute more toward economically sustaining the Center over time (e.g., through in-kind contributions), key informants in the village identified an ongoing need to educate villagers about the importance of actively supporting the Center.

As viewed through these three lenses, the Center seems to have created a significantly improved quality of life for its orphans. While these results are promising, there is a need for continued and longitudinal evaluation of the psychological well-being of the Center orphans, as compared to the children living in the village, to determine if these initial gains are being sustained over time.



The Idweli evaluation also demonstrates that scientifically valid and reliable tools developed in the United States, Europe and other western countries can be adapted to help assess the psychosocial well-being of OVC. The combination of quantitative and qualitative instruments employed in the study provides for a more robust analysis of well-being than could be attained through either approach alone. Additionally, this evaluation confirms the importance of assessing the effectiveness of the initial process used in developing and implementing a solution and not simply to the solution alone. The highly collaborative approach employed in analyzing the needs of Idweli's OVC and formulating a response may prove to be a significant factor in assuring its long-term social integration and sustainability. Recognizing the importance of using a collaborative development process is essential in any future efforts to address the needs of OVC.

Key Recommendations

Godfrey's Children Center represents one example of a growing number of community-based, hybrid alternative solutions for meeting the needs of OVC. The Center is a particularly notable example because of the extent to which a broad variety of local stakeholders was actively involved in the Center's development process and remains involved in Center operations. The Center also is notable because of the transformation it represents in OVC care. As compared to traditional forms of institutionalized care that typically isolate children, Godfrey's Children Center allows orphans to remain integrated in village life.

An increasing number of scholars and advocates see community-based, hybrid alternatives as an essential component of any response to the growing ranks of children impacted by HIV/AIDS in sub-Saharan Africa. Findings from the Idweli evaluation support that position. However, if hybrids are to be promoted as an effective and widespread alternative, support in several forms must be provided.

Process Support. Support must be provided for community decision-making forums that address the needs of OVC. Involving the community in decision-making processes will present a challenge because of the great diversity of tribal groups in the region and

because many of the most affected stakeholders have not traditionally participated in collaborative decision-making processes, least of all the orphans themselves. Community decision making also may present a challenge to those major donors and national agencies who prefer top-down, expert-designed approaches, which often stifle flexibility and development of a sense of community ownership. Collaborative efforts must fully empower people at the grassroots level, while simultaneously holding them accountable for meeting the needs of their OVC. Involving a community in making decisions generally leads to greater long-term commitment and project sustainability. The benefits realized should outweigh any difficulties associated with using this collaborative approach.

Program Support. Community-based initiatives may offer the greatest hope for addressing the needs of Africa's OVC. Such initiatives allow broad latitude for local communities to interpret and respond to issues based on their own needs and capacities. Implementing and sustaining hybrid solutions will likely require long-term support. Communities must actively engage in providing this support (based on their capacity to offer needed resources). At the same time, donors must recognize that the magnitude of the HIV/AIDS crisis requires long-term investment in OVC care, especially if the goal is to help OVC achieve greater overall well-being, rather than simply supporting them at a subsistence level. From an investment perspective, it is essential to conduct preliminary research to assess potential costs and benefits associated with different levels of OVC support and to determine the level of long-term investment required to achieve and sustain the desired outcomes (e.g., improved OVC well-being). Communities and donors should be held mutually accountable for results, assuring that OVC served receive the maximum possible benefits from the resources invested.

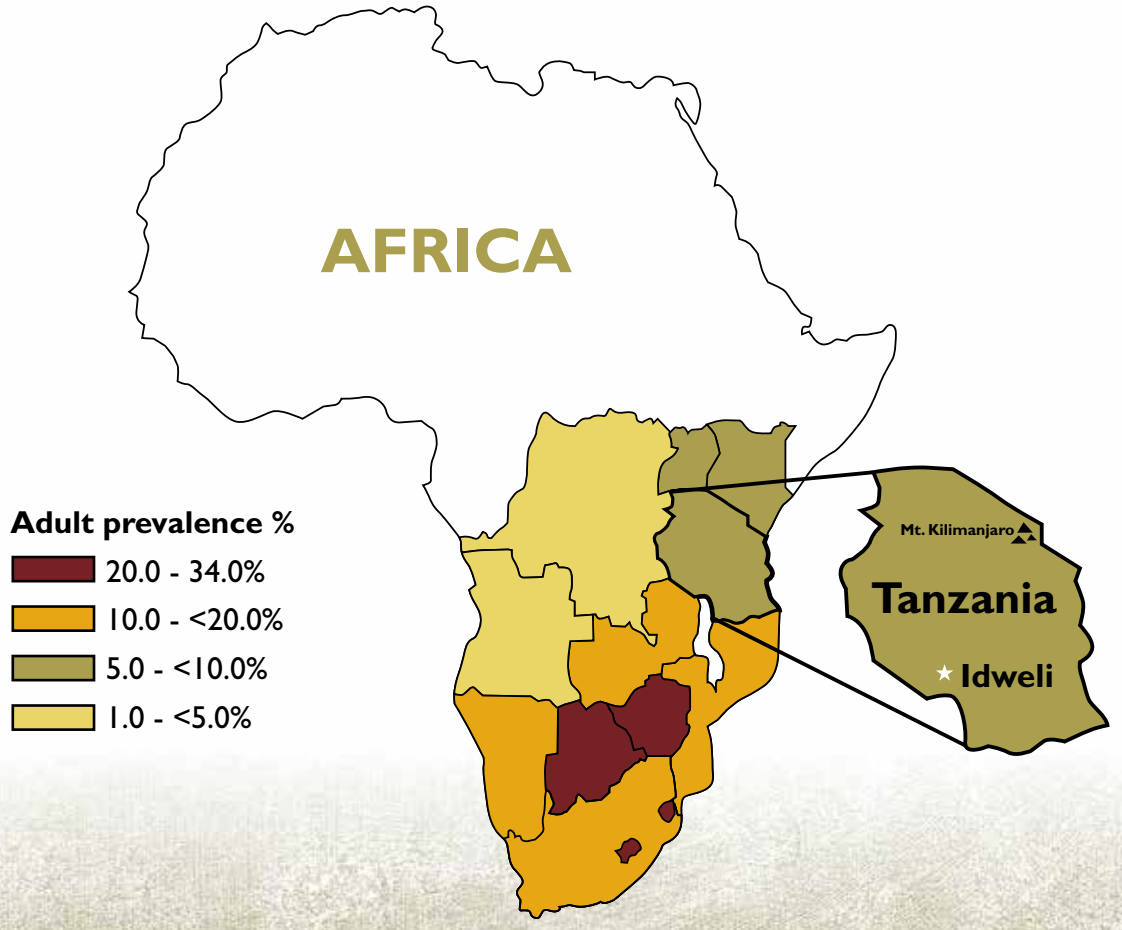
Evaluation and Networking. Very little scientific evaluation similar to that employed in Idweli has been conducted anywhere in the world. Clearly, systematic evaluation is expensive and time-consuming. However, if the development of hybrid alternatives for OVC care is to proceed on a sound foundation, evaluation should be integral to that effort. Organizations that are developing and implementing programs for OVC should be encouraged — and financially supported — to network amongst themselves, thus enabling the process of disseminating and discussing best practices. If a commitment is made to systematic evaluation, then a collaborative approach, such as community-based participatory research, should be employed. Research involving community members as partners in design and implementation of an evaluation process most likely will improve the quality of data collected, especially from children regarding their own well-being.

Part 1. Children Orphaned by HIV/AIDS

Today, 38.6 million people are living with HIV/AIDS. Africa bears the greatest burden of the disease with 24.5 million infected.[15] In 2003 alone, 2.2 million people died of HIV/AIDS in sub-Saharan Africa, 75% of the world's total. In addition to those infected, millions more are affected by HIV, most notably children. Out of 15 million children globally left orphaned by HIV/AIDS, 12.1 million (81%) live in the sub-Saharan region,[16] and 980,000 of these live in Tanzania — roughly one child in 17.[17]

The first AIDS case in Tanzania was reported in 1983. Twenty years later an estimated 1.6 million Tanzanians were living with HIV/AIDS. Although Tanzania ranks 10th in HIV/AIDS prevalence rates among countries in sub-Saharan Africa, its rate is higher than the regional (sub-Saharan) average and it ranks 4th in the number of people living with AIDS. About two-thirds of Tanzania's 38 million people live in non-urban areas (with *urban* defined as living in the country's major cities). Although the prevalence of HIV/AIDS in urban areas generally exceeds that in rural areas, in southwestern Tanzania around the city of Mbeya (the region in which Idweli is located), HIV/AIDS prevalence is almost twice the national rate (13.5% vs. 7.0%).[18] (See Figure 1 showing adult HIV rates in sub-Saharan Africa.)

Figure 1. HIV Prevalence in Adults in Sub-Saharan Africa, 2005
Source: Report on the Global AIDS Epidemic (2006). World Health Organization; Tanzania Commission for AIDS.



The Well-Being of Children Orphaned by HIV/AIDS

The physical, psychosocial and economic well-being of children orphaned by HIV/AIDS is significantly compromised. Many studies conducted in the United States, where there is a relatively high level of support for those infected and affected by HIV/AIDS, conclude that children of HIV-infected parents experience higher rates of grief, depression, dysphoria, anxiety, Post-Traumatic Stress Disorder, irritability, social withdrawal and impaired cognitive performance than others. Affected youth from communities unwilling or unable to provide adequate psychosocial support face additional problems, including inadequate housing or homelessness, financial hardship, substance abuse, HIV risk-taking, and initiation or exacerbation of mental health and behavioral disorders. Children's adjustment may be worsened by aspects of the social environment, including HIV-associated stigma, social ostracism and scarcity of resources and support.[19]

Studies of HIV/AIDS-related orphanhood in Africa and developing countries suggest that the impacts are even more dire. Children who lose one or both parents to AIDS are at risk of leaving or falling behind their age group in school because they have to assume their parents' duties if parents have died or are incapacitated.[20] Families often have to pull their children out of school to work when their financial burdens increase as a result of HIV/AIDS.[21] If both parents die, orphaned children often have to stay home to care for their siblings and themselves.

Another major challenge for AIDS orphans is stigmatization, as their parents' deaths from AIDS are often related to promiscuity, prostitution or other perceived improper behavior.[22] The children themselves are suspected of being HIV-positive. Stigmatization, together with economic difficulties, may compel orphans to migrate to cities, where they join the growing number of street children and often turn to jobs in the sex industry to provide for their basic needs. This places them more at risk of HIV infection and further transmission of the virus.[23]

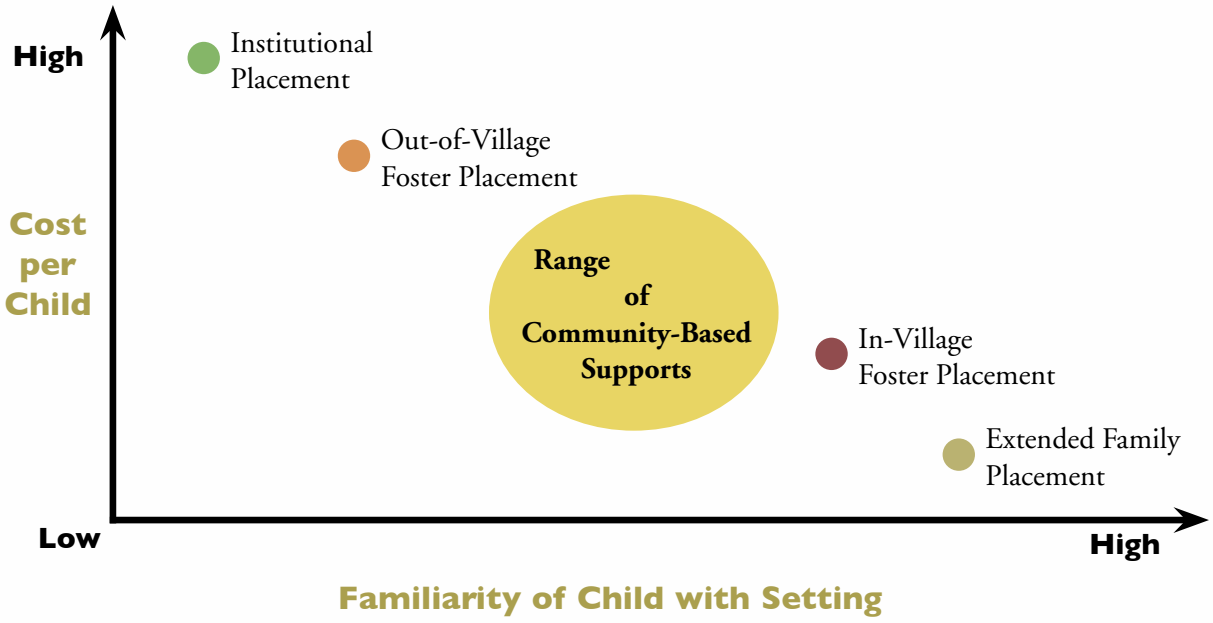
In a study of Tanzanian children ages 10 to 14, those orphaned by AIDS expressed a higher level of suicidal ideation and other psychological disorders compared to demographically matched non-orphans.[24] Another study of children in northwestern Tanzania by Ainsworth and colleagues found that maternal orphanhood correlated significantly with reduced educational attainment as well as physical stature.[25]

Literature Review: Providing for the Needs of Orphans of HIV/AIDS[26]

The scale of the HIV/AIDS epidemic in Africa has turned the disease into a generational threat to the future well-being of millions of people.[27] With UNAIDS estimating that the number of HIV/AIDS orphans in sub-Saharan Africa will double in the next decade,[28] it is of utmost importance that an effective solution for the care of these orphans be implemented.

It is generally agreed that orphans can cope better and escape many of the psychosocial difficulties that plague displaced children if they can stay in familiar, stable and nurturing environments. Conceptually, placement alternatives fall along a continuum, ranging from settings most familiar to the child to those least familiar. At the "most familiar" end, orphans are placed with extended family members in their communities; the next alternative is foster placement outside the family but within the community; then foster placement outside of the community; then providing community-based support for families (extended and foster) that have taken in orphans; and finally placement in institutionalized care, usually outside the community. Each alternative on this continuum has its own strengths and weaknesses.

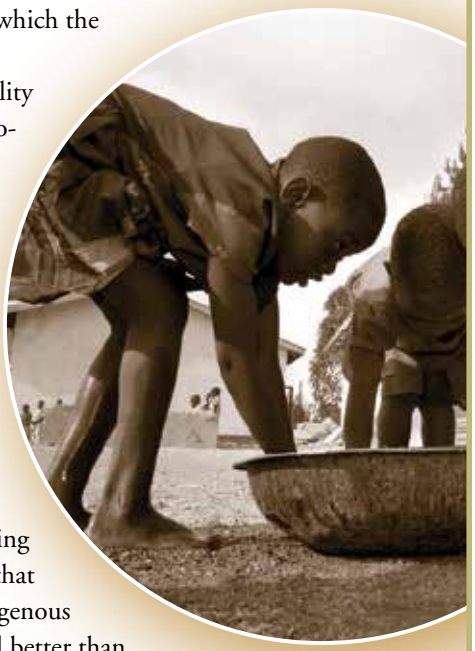
Figure 2. Continuum of Placement Alternatives for Orphans



Family Intervention. Customarily, in Africa, orphaned children have been absorbed into kinship groups, including grandparents, aunts, uncles and other extended family members. Based on a review of current literature, Foster and Williamson conclude that in extended families, children beneficially retain the continuity of familiar relatives and settings.[29] Gebru and Atnafou likewise assert that the family is unequivocally the best environment for the healthy growth and development of children.[30]

While the extended family has been the focus of care for orphans and has usually been able to effectively absorb orphans within communities, particularly in rural areas where extended families are more intact,[31] there are signs that the traditional extended family structure is fraying as the number of AIDS orphans rises.[32] Young adults are dying at such a high rate that adolescents and the elderly are left as heads-of-household and are falling into abject poverty.[33] According to Madhavan, anecdotal evidence indicates that a great many caregivers are destitute "grannies" and older children.[34] This conclusion is supported in a study by Oburu and Palmerus in Kenya which found that the average age of care-giving grandmothers is 62.[35] Usually, fostering grandmothers have "retired" from active life, but they are drawn back into family and community dynamics to care for homeless orphans.[36] For extended family members willing to take on the responsibility for orphans, the arrangement usually brings worsening economic conditions for everyone involved, since a great percentage of these caregivers are unemployed and/or elderly.

Foster Intervention. There is a long history of fostering children in Africa. Traditionally, fostering arrangements were agreements made with non-kin. A child was placed on a temporary basis and then returned to the family, with the understanding that the fostering family could rely on the child's family to reciprocate in the future.[37] The proliferation of AIDS orphans has changed that temporary arrangement into a permanent one in which the foster family must take full responsibility without any reciprocation, a situation that can drain a family of what scant resources it has.[38]

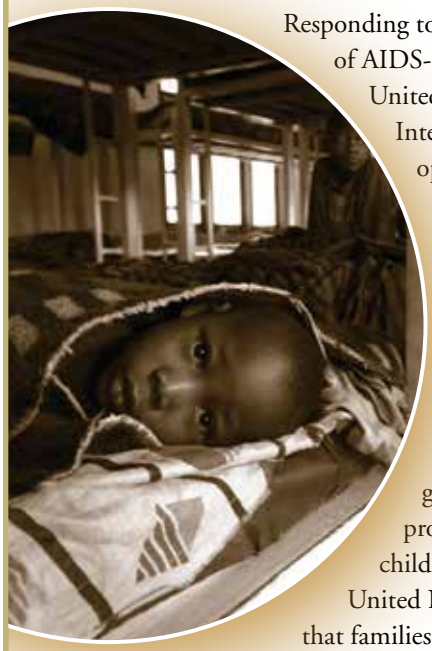


The treatment of orphans in foster families, in many cases, can be harmful to the children. The existing literature suggests that biological and indigenous children are treated better than foster children. It also reveals that foster children are more at risk of dying, getting ill, being undernourished and lacking material basics than a foster family's own children.[39]

Community-based Intervention. The assumption behind community-based approaches is that communities as a whole have better resources than either individual families or institutions to define and address collective needs if their efforts are strategically supported. Community-based programs typically do not provide shelter for orphans; rather, they support family and non-family caregivers so that they are better able to maintain orphans in their homes.

Experts on AIDS-orphaned children in Ethiopia observe that "in the context of communities in Africa, there is a strong relationship between the family and the community. In such societies, there is a general understanding that communities are equally responsible for the rearing, socialization and growth of children."[40]

Children Orphaned by HIV/AIDS



Responding to the growing numbers of AIDS-orphaned children, United States Agency for International Development (USAID) is developing community-based strategies, including those designed to strengthen the coping skills of families and communities, and to motivate governments to protect AIDS-affected children. Similarly, the United Nations advocates that families provide the first line of support for at-risk children, especially orphans; but if families cannot provide adequate support, their communities must provide what the families cannot.[41] In addition, Joint United Nations Program on HIV/AIDS (UNAIDS) and UNICEF further encourage decentralizing power and action down to the community level, where most of the decisions about caring for affected children are and should be made.[42]

Drew, Mafuka and Foster recommend that community-based programs replace the current widespread use of institutions to accommodate the rising tide of HIV/AIDS orphans in Africa.[43] Powell argues that, as compared to other institutions, community-based orphan care is relatively inexpensive and encourages self-reliance. When orphans remain in a family setting, they are able to get more than their physical needs met.[44] Drew points to a community-based visitation program in Zimbabwe as a model of success that they believe should be emulated throughout Africa.[45] The program identifies the neediest of families that are fostering AIDS orphans, monitors their needs and provides material assistance when necessary.

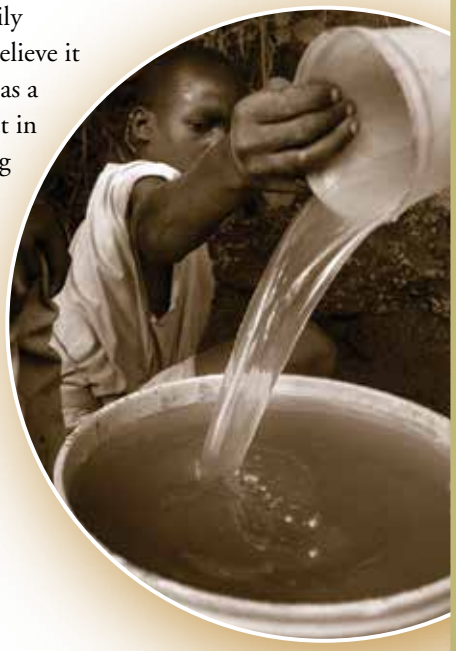
In South Africa, which has the highest rate in sub-Saharan Africa of people living with HIV/AIDS,[46] the locally based NGO Thandanani has mobilized communities to deal with their own vulnerable children and AIDS orphans. An examination of Thandanani's program by Guest[47] reveals that the organization shifted from its former top-down approach (one in which the program idea was brought to the community) to community-based initiatives (one in which the program idea is generated by the community). According to Guest, Thandanani's current approach supports each community's unique ways of coping with the AIDS crisis and encourages self-reliance. Guest acknowledges critics who are skeptical of the approach because setting up effective and representative local childcare committees is time-consuming and because too few communities are prepared to cope with the burgeoning number of AIDS orphans.

Although community-based programs seem to offer an attractive alternative, they have not been widely implemented. Hunter identifies several reasons: Children's problems receive little attention because children have little power; AIDS remains a taboo topic in many places; politicians and media focus on institutionalization; and institutions drain limited resources away from the implementation of other programs.[48] Foster also recognizes the difficulties of establishing and extending community-based support programs. He notes, "While community care strategies are the most appropriate means of strengthening the ability of extended families to cope with orphans, few states have yet established mechanisms to strengthen extended families and community safety nets through the provision of financial and technical support."[49]

Institutional Intervention. The most common alternative to the family placement of orphans is institutionalization. Institutional residential care — which typically involves moving children away from their communities — is being widely employed for children orphaned and/or displaced by a variety of socioeconomic factors, including rising poverty rates and internal family stresses caused by war, rapid urbanization and globalization.[50] Thousands of children are also being institutionalized because they have been orphaned by the AIDS epidemic.[51] Additionally, institutions are sometimes established in order to create jobs for unemployed community members.[52]

An international study for Save the Children concludes that the effects of institutionalization on children are detrimental and long-lasting. The children themselves state that they are discriminated against inside and outside of the care facilities, they are stigmatized by the outside community, and they are not prepared for adulthood by these facilities.[53] Normal developmental processes also can be stunted by uncaring, overburdened, unskilled child care workers who have no understanding of child development.[54] In addition, many children are physically, emotionally and/or sexually abused.[55]

Research by Drew, Mafuka and Foster in Zimbabwe concludes that institutions there are expensive, have limited capacity and meet only physical needs.[56] Foster further suggests that if institutions are utilized to house AIDS orphans, they should serve only as a transition before children are placed into family units.[57] UNAIDS and UNICEF executives agree, calling institutionalization an indicator of "family breakdown." They believe it should only be used as a temporary placement in the process of finding a family for displaced children.[58]



The Continuum of Supports and Hybrid Alternatives

As suggested earlier, support alternatives for HIV/AIDS orphans in Africa fall along a continuum ranging from placements close to family and community of origin to placement in institutions (orphanages) removed from familiar people and places. (See Figure 2.) Although most researchers support family-based placements as the best option, that alternative is being taxed to its limits and seems incapable of absorbing a projected doubling of HIV/AIDS orphans over the next decade. Institutionalized care is the alternative least favored by researchers because of negative impacts on children combined with high operating costs. (See Table 1 for a summary of the advantages and disadvantages of different interventions.)

The clear limitation of family- and institutionally based care leaves the option of community-based supports for orphans and families as an attractive middle ground. An article in *The Lancet*, offering a "Prescription for AIDS 2006-10," focused on that option, asking: "Why do we still not see communities as a means of societal change? Intermediate level mechanisms to mobilize and engage communities are rarely discussed. Yet it is these community-based responses that will have the greatest impact on the epidemic, as evidenced from the work in other fields, such as maternal and child health."[59]

In theory, support for the community-based option could help reinforce and expand the capacity of extended and foster families to nurture the orphans that they have taken in. Since, by design, this alternative encourages a great deal of variation from one community to the next, a more systematic understanding of how it works and its impact is essential before endorsing it as the solution. At the very least, it is necessary to understand how communities perceive and prioritize the challenge of accommodating their AIDS orphans. Just as important is understanding what it would take to implement community-support alternatives at a national scale. Are agencies at the national and international levels prepared to interface with individual communities? If not, what is required to make an effective connection between levels — that is, to empower communities?

With the continuum of placement alternatives in mind, it is useful to think of Godfrey's Children Center (whose development is described more fully in Part 2 of this report) as a "hybrid" alternative. The Center provides a quasi-institutional placement — one that operates within and largely under the governance of Idweli's village council. Children living at the Center are able to attend their local school and socialize with other children of their village. They can easily visit and spend weekends with relatives. The Center also serves other children of Idweli through its preschool and after-school programs. Because the Center has taken in the neediest orphans of Idweli, families presumably have more capacity to address the needs of their remaining orphans. In all these respects the Center is providing community support and not just traditional institutionalized care.

Most of the research cited here focuses on the impacts of orphanhood, specifically as a result of the death of parents due to HIV/AIDS, while relatively little research focuses on the effectiveness of different placement alternatives on the short- and long-term well-being of children. In fact, there has been very little scientific evaluation[60] of how well any of the placement alternatives are working. Much of what has been done focuses on the cost side with little if any attention to psychosocial impacts or to downstream effects on the resiliency of children, families and their communities. With billions of dollars committed to address the impacts of HIV/AIDS in Africa, there is a very shallow foundation of empirical knowledge regarding where and how to invest funds intended to improve the lives of children orphaned by this epidemic. Evaluation of the Godfrey's Children Center is designed to help fill this knowledge gap.

Table 1. Comparative Strengths and Weaknesses of Placement Alternatives

CareArrangement for Orphans	Strengths	Weaknesses
Placement with extended family member	• Child lives with familiar relatives. • Relatives provide a stable and nurturing setting.	• Families living in subsistent conditions have limited capacity to support orphans. • Orphans may be economically exploited by family members (e.g., required to farm instead of going to school).
Foster placement with non-family member	• Orphans are raised within a family structure, even if it is not their own. • If foster family is in the orphan's village, child remains in a familiar setting.	• Foster families may economically exploit orphans. • If foster family is not located in the orphan's village, child is separated from kin and village contacts.
Community-based support for extended family and foster placement	• Families are better able to absorb more orphans because economic and other strains are reduced. • Communities can adjust supports to fit their local needs. • This arrangement is more cost-effective than institutional placement.	• This arrangement may fail in the absence of strong community-based governance. • Little knowledge is available regarding how this type of placement works and how well these placements are serving OVC.
Institutionalized care	• This placement provides a last-resort option for orphans lacking family support. • It is easier to hold institutions accountable for expenditures.	• This setting is least familiar to the child. • This placement tends to result in stigmatization of children and alienation from community. • This arrangement has a higher cost per child.

Collaboration and Sustainability

The summary of approaches addressing the needs of OVC, specifically those orphaned by HIV/AIDS, reveals rejection of institutionalized placement and increasing support for community-based alternatives. As suggested previously, there is little empirical evidence regarding how such alternatives are forming and operating in Africa. However, community-based approaches to healthcare have been conducted in the United States. Findings from the U.S. literature may prove to be relevant to the development of community-based alternatives in Africa.

In the early 1990s, Chrislip and Larson[61] reported conclusions from a three-year qualitative and quantitative analysis of 52 cases of highly successful community action in the United States. Though many qualities were present in these successful community initiatives, two factors were present in all 52 cases: *strong process leadership* and *an open and credible process.*

The first factor, strong process leadership, involves moving away from a traditional hierarchical model where leadership entails strong advocacy of a particular point of view. Process leadership focuses on bringing the appropriate people to the table and keeping them there through difficult periods; facilitating the expression of divergent points of view in a manner that respects differences; and making sure that all stakeholders feel trusted and valued throughout the process. In a comprehensive review of the literature on collaborative leadership in public health, Larson, Sweeney, Christian and Olson[62] analyzed 11 studies that found a significant relationship between the presence of strong process leadership and improvements in health outcomes, ranging from the decline of infant mortality rates to improvements in cardiovascular health.

The second factor present in all 52 cases of successful community action studied by Chrislip and Larson[63] was a credible and open process. This factor refers to the extent that stakeholders perceive the process to be genuine and authentic. Decisions have not already been made in advance with the process simply confirming those decisions. The process is free from behind-the-scenes manipulation and safeguards are in place to check the disproportionate influence of powerful individuals, funders or agencies. In short, the people participating in the process feel that they directly influence the decisions made and that they are likely to have some impact on the root problem they are addressing. An open and credible process embodies what the procedural justice literature refers to as the "voice effect."[64] That is the strong tendency for people to see processes as fairer if they have an opportunity to influence the process before decisions are made. If stakeholders perceive the process to be open and credible, they will invest more of their effort and resources into the process in ways that promote greater success and sustainability.

Three decades of experimental and field research demonstrate that the way individuals see the process in which they are involved affects their attitudes and behavior, that these effects are substantial and that they occur in a wide variety of contexts.[65] In the context of community health initiatives, several field studies have been conducted that illustrate the importance of the quality of the decision-making process on the success of an initiative.

One field study involved a 10-year follow-up to the Colorado Healthy Communities Initiative (CHCI).[66] The CHCI was begun in 1992 to assist communities in defining their own vision of a healthy community and working to achieve that vision. The $8.8 million USD initiative was modeled on Healthy City and Healthy Community programs developed by the World Health Organization (WHO). The 28 communities completed a variety of projects consistent with each community's vision of a healthy community. Approximately 10 years after the completion of the projects, a follow-up study was conducted to evaluate the success of these projects, what factors accounted for their success, which projects were still active and what factors influenced their sustainability. When the active projects were compared with those that were inactive, large differences were found in the quality of the process employed by the original stakeholder group that planned and started the projects. Even after 10 years, those projects that were initiated through a process that was open and credible were much more likely to still be active than were those sites where initial process quality was low.

A second field study[67] involves 16 communities, each using a stakeholder group to implement the same type of program. The program involves nurses making home visits with young, low-income, first-time mothers. These communities vary widely in the nature and quality of the processes used in bringing the program to their respective communities. Three to four years after the program had been implemented in these communities, the relationships between the early stakeholder processes and program outcomes, as seen by the participants, were examined. The program outcome that has varied most widely among the communities and has been most "problematic" is attrition (i.e., some participants have not remained active in the program or satisfied fundamental requirements for program success to occur). Data indicate that the quality of the early stakeholder process accounts for 67.6% of the variation in the outcome "attrition." Three to four years after the program was implemented in these communities, the quality of the early stakeholder process is still accounting for two-thirds of the variance in the extent to which the young mothers are staying with or dropping out of the program.

These results can be interpreted as supporting other lines of research that yield a common-sense conclusion: enthusiasm and commitment, like other patterns of behavior, are contagious. If the early stakeholder group believes in — and is committed to — the process, that commitment can transfer to the individuals who are administering and delivering the program, and can ultimately transfer to program participants.

It is apparent from this research that there is a significant, positive correlation between the quality of the initial process and the success and sustainability of the product of that process. The Idweli research team believes that relatively small variations in the process employed by the original stakeholder group that planned and started the project can make large differences in the extent to which people involved in that process are committed to it, are willing to stay with it, and are optimistic about what their efforts will produce. Idweli's residents were able to choose for themselves how best to meet the needs of their OVC. The process was open to voices (women and children) not typically heard in significant village decision-making processes. The village's efforts were guided by strong leadership that is likely to sustain commitment to the process. These three factors — commitment, willingness to stay with the process and optimism — by themselves were sufficient to produce an outcome that was out of the ordinary. Interventions like Idweli have a better chance of being sustained in the long run if a collaborative process, featuring strong, open and credible leadership, is used to identify problems, implement and sustain solutions.

Part 2. Godfrey's Children Center in Idweli, Tanzania

Godfrey's Children Center in Idweli, Tanzania, opened its doors to orphans in May 2005. The Center is the result of a joint effort between Tanzanian- and U.S.-based NGOs. It is also the product of a collaborative effort with the people of Idweli who helped design, build and now govern the Center. In a very real sense the Center is a natural experiment. It was not a preconceived solution imposed on the community; rather, it came about through a highly participatory decision-making process.

The Center represents a hybrid with characteristics of both extended family placement and institutional placement for OVC. A scientifically designed and implemented evaluation of the Center provides insights into the effectiveness and limitations of this type of hybrid as well as insights into the challenges of conducting an evaluation of the well-being of OVC in a rural African setting.

The People and Environment of Idweli[68]

Idweli is a small village situated in the wooded highlands of southwestern Tanzania. It is located in Isongole ward about 28 kilometers (17 miles) from the city of Mbeya along a highway that carries heavy truck traffic as it connects Malawi with the rest of Tanzania and especially its port at Dar es Salaam.

Economy. The development of Idweli occurred in three distinct stages over several decades. When the British took over the administration of Tanganyika (now Tanzania) after defeating the Germans in World War I, they built a road linking the shores of Lake Nyasa to Mbeya. This road ran through Mporoto, an area inhabited by indigenous Safwa tribes. A workers camp was created at the place now known as Idweli. People migrated to the area seeking employment. Once the road was completed, many workers remained in Idweli, supporting themselves through subsistence farming.

In the 1950s, British colonial authorities introduced pyrethrum (a natural source of the insecticide dichloro-diphenyl-trichloroethane, or DDT) as a cash crop. The village experienced a surge in population as people came to live and work on the pyrethrum plantations. The introduction of pyrethrum cultivation greatly enhanced the village economy and stimulated population growth. The colonial and later the Tanzanian government supported pyrethrum farmers by providing them with seeds, fertilizers and pesticides. However, by the late 1970s, the development of synthetic alternatives greatly reduced demand for pyrethrum, leaving Idweli's economy without an export product.

Idweli's economy today is largely based on subsistence agriculture. Individual households have a number of small, scattered plots where they cultivate maize, sweet potatoes, buckwheat, beans, peas and squash largely for their own consumption. Most villagers also grow some Irish potatoes for sale. Irish potato cultivation was introduced in the area in the mid-1960s. Although the crop is expensive to cultivate, requiring intensive fertilization and the use of herbicides, it is fast-growing and sells quickly. Trucks come frequently from major cities in the country to buy potatoes and take them to market.

Though a few prosperous people keep cattle, grazing has been largely phased out because land is needed for farming, leaving little available fodder. The few cattle remaining are good for meat, but are not prolific in milk production. Some people raise pigs or goats, though most households have only a few chickens, and these are a native breed that lays few eggs.

Godfrey's Children Center in Idweli, Tanzania

Most villagers do not have sufficient cash to utilize a bank. To obtain additional cash, they become members of an *Upatu*, which is a traditional East African savings system. An Upatu in Tanzania typically involves 10 to 20 women in a rotating savings and credit association. Each woman contributes a regular sum and can borrow from the group against credit. Traditionally the money was intended to be used in social hardship situations such as illness or death. It may also serve for less dramatic needs, such as school fees or uniforms. More recently women have been using these loans to set up small businesses.

The Upatu provides loans within a circle of people who presumably know one another well enough to trust each other to repay the amounts they request. But as young parents die of AIDS, leaving numerous orphans behind, many Upatu in Africa are reaching the end of their financial tethers.[69]

In short, Idweli's economy is subsistent. Average cash income is estimated to be 70 cents USD per day per household. (The estimate of 70 cents USD per day is based on self-reports by villagers at the November 2002 Future Search conference held in Idweli. This amount reflects income from earnings consisting of any wages, plus earnings from the sale of crops or other goods. It does not reflect the value of crops produced and then consumed by a household.) Intermittent periods of relative prosperity have been spawned by demand for export agriculture, but fluctuations in that demand are wholly outside of local control. Even among villages of the district, Idweli's fields are considered less productive, and the purchase of fertilizer is beyond the means of most families.

Society. The village of Idweli is organized into five hamlets (*mitaa*) under the administrative rule of a village chairman who presides over a village council of 25 members representing most of the clans in the village.[70] In Idweli, the village chairman is also the chief. Hamlets are further organized into ten-cell units, each unit consisting of 10 households.[71]

Each ten-cell leader plays a role in implementing local government functions at the household level, especially those that pertain to enforcement of law and public safety. Ten-cell leaders help mediate disputes within and between households and communicate to and involve heads of households in local government affairs.

Today, Idweli has about 2,500 inhabitants, fairly evenly divided between males and females. Of an estimated 735 children in the village, nearly 300 are orphans. The village has one dispensary with no inpatient facilities; it is served by a medical assistant supported by two nurses (also responsible for the seven other villages in the ward); and a primary school with an enrollment of 438 students.

The basic social unit of the village is a polygamous family, consisting of a man, his wife or wives, and their children and grandchildren. As is the case in most African societies, the family is strongly patriarchal with the man having the dominant role. Inheritance of property is from father to son. Traditionally, women have not been allowed to own land, and this generally remains the case today.

Godfrey's Children Center in Idweli, Tanzania

In Idweli, women are responsible for the basic domestic chores, including taking care of children and sick or elderly relatives. Women may also tend to the fields, but the primary responsibility for farming is with the men. Young girls are encouraged to learn domestic work and are socialized to expect marriage in the normal course of life. Until relatively recently, sexual relations before and outside of marriage were not accepted, and sexually transmitted diseases were not known in the village. This changed with the introduction of market fairs, which brought traveling businessmen who had sexual relations with the villagers and thus spread sexually transmitted diseases. Also, because Idweli is located on a major truck route, many women in the village and nearby Mbeya have found a viable income in trading sex for money and other items. Their relative prosperity serves as an enticement for others to follow them. When they get pregnant, many come home to deliver their babies and then leave again after delivery. The children left behind add to Idweli's population of vulnerable children.

The aspirations of young men have changed in recent decades. Many see life in Idweli as monotonous and unchanging. With sufficient income hard to obtain, they move to Mbeya or other cities where they hope to improve their lives. The little money they earn is often spent on girls. Many of these liaisons result in pregnancies. Consequently, more children are left in the hands of elderly, ailing and desperately poor grandparents, generally grandmothers.

Orphans and Vulnerable Children. The rise of out-of-wedlock births and the burden this places on grandparents and other extended family members stretch thin the capacities of a village already living on a subsistence economy. Greatly adding to this burden is the death of parents due to HIV/AIDS. The rate of HIV infection in the Mbeya region, where Idweli is located, is over twice that for Tanzania (13.5% vs. 7%). This rate may be higher because of the highway to Malawi and the subsequent sex trade generated by truckers.

It is difficult to determine specifically how many of Idweli's children are orphans as a result of AIDS. Women who are caretakers for their grandchildren are often unsure of the cause of their own children's deaths.[72] This seems to be especially true for adult children who died years ago when the symptoms of AIDS were not yet locally recognized. Nevertheless, the high prevalence of HIV infection in the region suggests that a correspondingly high rate of orphans is associated with deaths due to AIDS.

The fact that approximately 40% of Idweli's children are now single or double orphans (with neither mother nor father living) is the result of more than abandonment and AIDS. A third major contributor is a single incident in 2000 that resulted in the deaths of 42 adult male villagers. In that incident, a petrol truck overturned on the highway above the village. The men ran out to assist the driver and to gather petrol in buckets as it spilled onto the highway. It is reported that one person tried to remove the truck's battery, which released a spark that ignited the petrol. Everyone in the immediate area was killed when the truck exploded. Because men typically have more than one wife, the loss of 42 men in one accident affected far more children, but the exact number is not known.

Godfrey's Children Center in Idweli, Tanzania

With so many orphans to care for, how are families and the village coping? A focus group conducted with adult caregivers sheds some light on that question.[73] Participants stated that the orphans they personally care for are treated as equals to the other children in their homes. However, they observe that other orphans are discriminated against by those who care for them and that the difference between village orphans and non-orphans is evident by their clothing and lack of cleanliness. Participants stated they believe that, in general, orphans in the village are not as well cared for today as they were in the past.

Focus group participants felt that there are many reasons for the change in how orphans are cared for. The main reason is that the number of orphans has increased dramatically over the years, primarily due to disease. Most participants mentioned HIV/AIDS, but some also mentioned tuberculosis and malaria. Some stated that the petrol truck explosion in 2000 also contributed to the increase in the number of orphans.

Since there were fewer orphans in the past, extended families could more easily accommodate them. Additionally, in the past, the care of orphans was regarded as a communal responsibility. However, the values of the society have become more individualistic, and therefore people are left to care for orphans on their own.[74] In interviews, villagers have observed:

"In my opinion, I think there is not enough love compared to those ages of our forefathers because they could build a house together and eat together. But in the current situation, people eat individually and within their own families, so it becomes difficult to invite a stranger into your house." — Male village caregiver

"Maybe it's the economic situation making people value more what they have, unlike those days when we used to live in communalist societies and shared everything from food, to houses and cow barns."
— Male village caregiver

Participants discussed the economic challenges they face and noted that it costs more today to care for children than it did in the past. Children cannot be sent to school without clothes (uniforms) that have to be purchased with money and there are greater costs related to providing children with medical treatment:[75]

"Life is now hard because when sick, you have to pay money to be treated. In the past we were treated free." — Female village caregiver

With the addition of the petrol truck explosion, the orphan situation in Idweli may be more extreme than would be encountered in most villages. Arguably, the severity of this challenge and its impact on the community at large makes Idweli an excellent place to involve the community in collectively addressing the challenge of caring for OVC.

Development of the Children's Center

It is not often that a child raised in Idweli graduates from college and enters a profession. Godfrey Msemwa and his brother Fred, both born and raised in Idweli, entered college in Tanzania; Godfrey studied medicine and Fred studied finance. While in school, both men talked about the children of Idweli and what they might be able to do for them. They shared their ideas with an ever-widening circle of friends, and within a year had drafted a constitution for an organization called Every One Child. They heard about a piece of land that was available on the edge of the village and wondered how they might acquire that land and someday provide a sanctuary or a children's center for the OVC of Idweli. The year was 2000. Before the end of the year, Godfrey drowned while swimming with friends and fellow students off a beach in Dar es Salaam.

Godfrey's Children Center in Idweli, Tanzania

In 2001, the name of the small organization, Every One Child, was changed to Godfrey's Children. Neema Ngana, a friend of Godfrey's, was studying for her master's degree in public health at Loma Linda University in the United States. Working with fellow students from Africa, she sought ways to support Godfrey's Children, which was still struggling back in Africa. As part of this effort, Ngana contacted Barry Childs, director of Africa Bridge, an NGO based in the United States. A supportive, coaching relationship developed between Africa Bridge and the Loma Linda group.

In August 2002, Childs met with organizers of Godfrey's Children in Tanzania. He was motivated to assist the group in realizing Godfrey's vision and recognized that any project it supported should emerge out of a collaborative process involving community members. Childs was familiar with a collaborative decision making process called Future Search and thought that it could be effectively employed in Idweli. Future Search is a decision-making tool for convening a diverse group of stakeholders (usually 60 to 70 people) in a dialogue intended to help them discover common values upon which they can base concrete action plans.[76] Childs enlisted the assistance of Victor Dukay, Ph.D., director of the Lundy Foundation (a small NGO also based in the United States), who has experience in training leaders to address the needs of people infected and affected by HIV/AIDS. Dukay recalls:

"The greatest strength (of the process) was Barry (who speaks Swahili) doing a great deal of homework with the chief and the executive committee of Idweli around what collaboration looks like and what a Future Search process would entail... . Ultimately, the chief was very courageous in allowing this kind of process to be done on his watch, since this kind of decision making is very uncharacteristic of village culture."[77]

In November 2002, Childs and a small team of co-facilitators returned to Idweli to conduct a series of Future Search-based community meetings. The whole purpose of Future Search is mobilizing people to work toward a desired future. Regarding the meetings, Childs recalls:

"The agenda is pretty simple. The focus was about the future of orphans and vulnerable children in Idweli. It's a three-day meeting, over two nights, starting at midday - Day One. The first part of the agenda is looking back at the history of orphans in the community and internationally. Just sort of getting the history and thinking around AIDS and orphans in Africa, and also getting people's personal stories in the village. We move from defining current reality to dreaming 5 to 20 years ahead, then saying: 'What do we have to do to make that dream a reality?' That is basically the agenda."

The meetings had a significant feature, new to the Tanzanian culture. As Childs describes it:

"We knew that the children were a key stakeholder [group] and had to be a part of this. We decided that, rather than just having the children be a part of the meeting, we would have two meetings. So we actually did the whole process with children first. We had 64 kids (ages 7 and up; half orphans, half non-orphans). We then asked those children to select eight of their number to meet with 56 adults — government, farmers, women's groups — all the stakeholders in the community. And the children actually opened the adult meeting and just blew the adults out of the water. I mean they were so incredible that it just set a whole tone for the meeting. I decided from then on, if I ever have a meeting again, I want children there."

At the joint meeting, 19 project ideas advanced to a short list. The adult projects tended to focus on income generation: farming, fishing and forestry. The children's projects covered a wide array of efforts, such as gardening, handcrafts, chicken raising and, most notably, a children's center that would be a home for orphans. Although the idea of a center was supported strongly by the children, it initially received only moderate support from the adults. In interviews about the process, one participant said he believed that an impassioned and somewhat angry speech by the chief about the need for change influenced some of the adults in the direction of listening to the children.

Following the meetings there was widespread uncertainty about what would happen next and how these ideas would be put into action.[78] Although there was clear support for a children's center, it remained to be seen whether the emerging collaboration between Godfrey's Children, Africa Bridge and the Lundy Foundation could raise enough money to buy construction materials, and whether the villagers would build the facility and help make it a sustainable project.

The Children's Center in Operation

Construction of Godfrey's Children Center in Idweli began in January 2004. Land was donated by the village council.[79] Funds for building the Center were raised by Africa Bridge and the Lundy Foundation. Capital construction and equipment costs totaled $48,000 USD. Idweli residents contributed their labor to clearing the site, and were then paid to make bricks, build the foundations and provide labor for construction.[80] The Center admitted its first orphans in May 2005.

With the exception of the public school, the Center has some of the most substantial structures in the village. It consists of three long, white stuccoed buildings with red and blue trim. Two buildings serve as girls' and boys' dorms, each equipped with double-decker bunk beds. An adult lives full time in a private room in each of the dorms and there is also a resident manager and (at the time of this evaluation) a full-time, volunteer registered nurse from the United States. Often one or more volunteers from the United States or elsewhere, usually secured through Africa Bridge, stay at the Center and work with the children. A third building provides a common space that serves as a dining hall, meeting space and classroom. There is a separate kitchen structure at one end of the complex, and a toilet and shower house at the other. Electricity recently was installed.[81]

Five months after opening, the Center was home to 58 orphans: 34 girls and 24 boys. That number is about a fifth of all orphaned children in Idweli. Orphans were selected by a village committee based on the severity of their need, with emphasis on double orphans from households with very old caregivers in the extended family and orphans from families that already had too many children to care for. The remaining village orphans live with extended family members or in some kind of fostering arrangement with non-family members. For 90% of these orphans, the primary caregiver is female, most often a grandmother.

Godfrey's Children Center in Idweli, Tanzania

Center children range in age from 2 to 16, with an average age of about 10 years. More than 80% of the children are double orphans; the rest have one parent still living, but there is no contact and the parent provides no viable support. About a third of the children have been orphans for three years or more, but over a third cannot recall when their parent(s) died. There are two sets of brothers and sisters.

Children receive three meals a day. Preschool instruction is provided for the youngest, and other children in the village are invited to participate in that program. The Center also provides evening after-school instruction to help children with their homework and especially to help them prepare for secondary school exams.

Children maintain social integration with other villagers and family members through schooling and visits with relatives. Approximately 90% of the Center children attend Idweli's public school, while the remainder are in the Center preschool. Family members are encouraged to visit with their children during the week, though such visits rarely occur.

The Center is governed by a board consisting of the village chairman, plus four female and four male members. Their responsibilities include selecting the children, supervising the Center's manager, overseeing the Center's budget and all other resources, recruiting volunteers, maintaining relations with current and future donors, and making decisions regarding building maintenance and improvements. It costs approximately $1,700 USD per month to run the Center, which translates to about $1 USD per day per child. With an estimated per capita village income of 70 cents USD per day, this is probably a higher level of support than most other village children receive.

Idweli represents a hybrid with characteristics of both extended family placement and institutional placement for OVC. Rather than removing orphans from their community, a residential facility was created that allows orphans to maintain integration with village life and family members. Because of the exceptionally high number of orphans in Idweli, Center placement offers some relief from the pressure of absorbing orphans within extended families and among foster households.

There are relatively few scientifically conducted evaluations of the effectiveness of placement and support options for children orphaned by HIV/AIDS. In part, this may reflect the fact that many interventions, including development of the Children's Center in Idweli, are so small that they figuratively fly below the radar. Furthermore, given the magnitude of need, international donors may be looking for big ideas and big projects, but as William Easterly suggests in *The White Man's Burden,* smaller projects have the distinct advantage of being closer to those being served and therefore potentially more responsive and accountable to their needs.[82] The Children's Center at Idweli represents this kind of project: small, responsive and collaborative.

Evaluation Questions

The evaluation project (described below) had two interrelated objectives: first, to evaluate the Children's Center's impact on the well-being of the orphans living there as compared to orphans and non-orphans living in the village; second, to develop and implement effective and culturally appropriate methods for evaluating the well-being of OVC in a rural East African setting.

In addressing both of these objectives, it is useful to focus on the lives of orphans through three lenses: psychosocial, physical and socioeconomic. (See Figure 3.) Through the psychosocial lens, the evaluation looks at the orphans' psychological well-being and social integration; through the physical lens, it looks at their health; and through the socioeconomic lens, it looks at the social and fiscal costs of the support Center orphans are receiving and whether or not it can be sustained. With these lenses in mind, three specific research questions were stated:

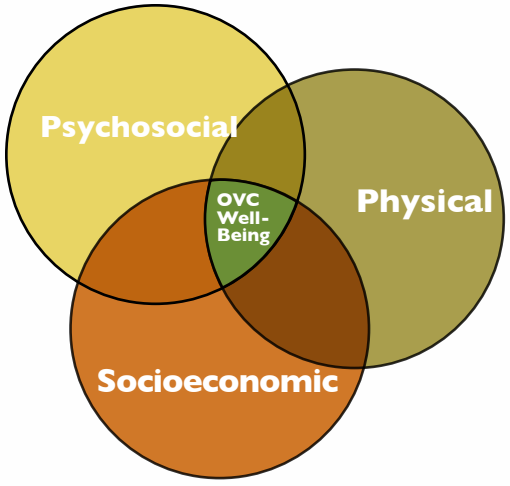
- Does living at the Center positively impact the psychosocial well-being of resident orphans?
- Does living at the Center positively impact the physical health of resident orphans?
- Is the support provided by and through the Center socially and economically sustainable?

The three questions are interrelated: If the answer to the first two questions is positive (the children are both psychosocially and physically better off), then it is necessary to consider whether the gains and the means by which they were achieved can be sustained. The fourth research question of this study was:

- What are the most effective measures and methods available for scientifically evaluating the well-being of orphans, especially those who have lost their parents to HIV/AIDS?

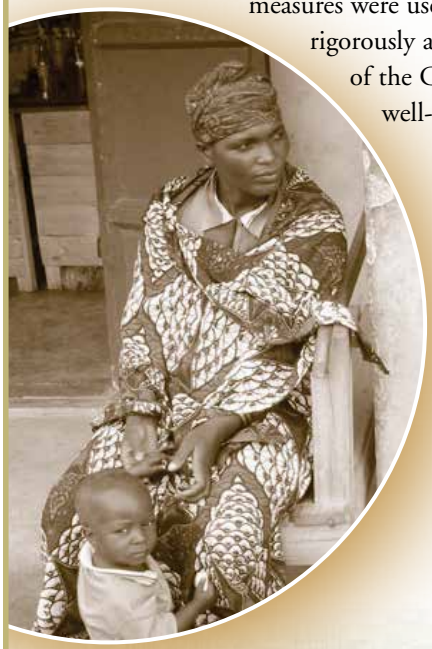
Development of an appropriate methodology — that is, methods that are valid and reliable, and by which data can effectively be collected in the field — is essential to advancing knowledge about alternative approaches to supporting the needs of orphans and determining which approaches merit replication.

Figure 3. Three Lenses for Evaluating the Well-Being of Orphaned and Vulnerable Children



Evaluation Design

Ideally, the design of the Children's Center evaluation would have involved pre- and post-measures of the psychosocial and physical well-being of its orphans. Unfortunately, children had already been admitted to the Center before the evaluation could be designed. It was clear at the outset that there would be at least eight months between the time the children started living at the Center and when data collection could begin. It was expected that the most dramatic changes in their physical condition would already have occurred during that time. Although some data could be retrieved from archival sources — for example, measures of weight made at time of admission, dispensary records that were kept on an ongoing basis, and school attendance and achievement scores — there was no way to adequately reconstruct pre-measures ex post facto. Consequently, comparative samples of children — both orphaned and non-orphaned — were employed; interviews and focus groups were conducted with adults; and other measures were used to identify, as rigorously as possible, the impact of the Center on the well-being of its residents.



During August and September 2005, the Lundy Foundation convened a team of prominent Tanzanian and U.S.-based experts in psychiatry, child psychology and development, familial relationships, social anthropology, cultural competency, collaboration, community development, leadership and evaluation to design the evaluation methodology. After identifying a potential set of evaluative measures, the design team met in Tanzania for three weeks to fully develop the evaluation methodology. This included selection and drafting of quantitative and qualitative survey tools, field testing them for cultural appropriateness and adapting them for use in the Tanzanian cultural context. From October through December 2005, the project team finalized 17 quantitative and qualitative survey tools and hired local Tanzanians to translate all tools into Swahili, then back-translate them into English and review them for accuracy.

Sampling Design

A total of 209 children in four sample groups and their parents or caregivers participated in this evaluation. Additionally, interviews were conducted with 70 key stakeholders from the village.

An important part of the evaluation design was to administer measures of psychosocial and physical well-being to comparison samples. (See Table 2.) For the purposes of this study, orphans were defined as children who either have lost both parents or whose parent(s) have effectively abandoned them; that is, they are double orphans. The purpose of concentrating on double orphans was to consider the well-being of children most likely to be in the greatest need.

Sample Groups

- Center Orphans: Of the 58 children living at the Center, 51 were included in the sample group; only children 5 years of age or older were included in the study.
- Village Orphans: This group included 40 children living with caregivers in the village.
- Village Non-Orphans: This group included a random sample of 99 children living with their parents in the village.
- Children in Microfinance Loan Households: This group included 19 children (orphans as well as non-orphans) living in households receiving a microfinance loan either from Africa Bridge or from a savings and credit association (SACCOS).

Table 2. Comparative Children Samples

Sample Group	Description	Sample Size
Center Orphans	Double orphans	51
Village Orphans	Double orphans	40
Village Non-Orphans	Double-parented children	99
Children in Microfinance Loan Households	Africa Bridge orphans	4
	Africa Bridge non-orphans	5
	SACCOS orphans	2
	SACCOS non-orphans	8

Village ten-cell leaders assisted field work assistants by mapping the community, identifying every family in the village, creating a list of all children in each household and determining their orphan status. Table 3 provides an overview of the demographics of children participating in the evaluation study. To preserve confidentiality, unique identifiers were assigned to all project participants, linking each child's number to a parent or caregiver's number.

Table 3. Demographics of Children Participating in the Evaluation

Variable	Center Orphan (n=51) %	Village Orphan (n=40) %	Village Non-Orphan (n=99) %	Microfinance Loan Children (n=19) %
Male	42.3	47.5	47.5	52.6
Female	55.8	52.5	52.5	36.8
Age	Mean=10.40 S.D.=3.37 Range=5-15	Mean=11.97 S.D.=3.18 Range=3-17	Mean=9.25 S.D.=3.67 Range=4-19	Mean=11.44 S.D.=3.12 Range= 6-17
Attend school	90.4	75.0	82.8	84.2
Mother living	17.3	12.5	97.0	73.7
Time since mother's death				
<6 months	1.9	2.5	1.0	0.0
6-12 months	1.9	2.5	0.0	0.0
1-3 years	11.5	10.0	0.0	33.3
>3 years	30.8	37.5	1.0	0.0
Don't know	36.5	25.0	0.0	66.7
Father living	7.7	5.0	98.0	63.2
Time since father's death				
<6 months	1.9	5.0	0.0	0.0
6-12 months	0.0	2.5	1.0	0.0
1-3 years	7.7	10.0	0.0	5.3
>3 years	32.7	30.0	0.0	10.5
Don't know	38.5	32.5	0.0	10.5
Caregiver gender*				
Male	88.5	10.0	8.1	5.3
Female	11.5	90.0	41.4	36.8

* Some children in the village non-orphan and microfinance loan sample groups did not respond to the gender question.

Field work assistants administered quantitative and qualitative surveys both to children and to caregivers. For Center children, the caregiver was the person with the most daily contact with a child. Similarly, for village orphans and non-orphans the caregiver was the person identified by the child as having the most daily contact with the child.

Caregiver focus groups included parents and caregivers who volunteered from among those who completed caregiver interviews.

Center development process focus groups included children and adults who participated in the Future Search process that led to the creation of Godfrey's Children Center.

Interviews conducted with village leaders and board members of Africa Bridge, Godfrey's Children and the Lundy Foundation helped provide a clearer sense of village life, the effects of orphanhood on Idweli's children, and the formation and operation of the Center.

Methods and Instruments

A principal objective of the Rockefeller Foundation in funding this evaluation was to identify the most effective ways of assessing the psychosocial well-being of children orphaned or made vulnerable by HIV/AIDS. Consequently, considerable attention was given to the review and selection of survey instruments to be used for the evaluation. In order to broaden the interpretation of survey results, interviews were designed to be administered to both children and their caregivers. Similarly, the evaluation design paired quantitative measures of the physical well-being of children with responses from interviews with key informants, including the doctor at the village dispensary, the headmaster of the local primary school, the full-time volunteer nurse and other staff at the Center.

Cultural validity was another key concern in designing and conducting the evaluation, especially in regard to such issues as how the community makes decisions and acts together; how families care for the needs of their members; and how children cope with grief and loss. To accurately understand and interpret these social processes requires an understanding of the cultures of Tanzania and, more specifically, of Idweli. To achieve accuracy of cultural understanding, the project was designed to include a close collaboration between U.S. and Tanzanian researchers in the development and analysis of survey findings, focus groups and interviews.

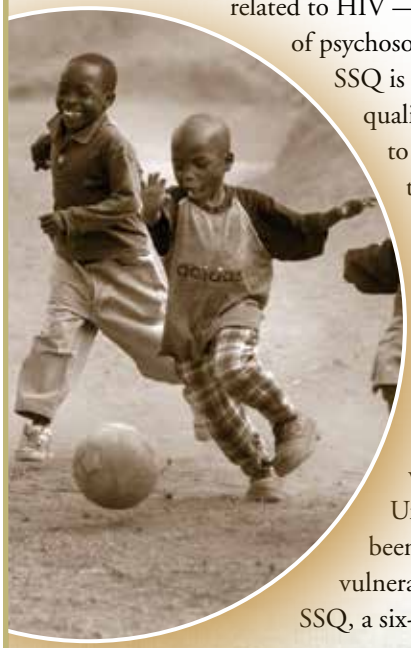
All quantitative and qualitative instruments were translated from English into Swahili by a team of translators from the University of Dar es Salaam and then independently back-translated into English. U.S. and Tanzanian team members worked together to resolve inconsistencies, adjusting the Swahili versions as necessary to ensure appropriate transfer of conceptual meaning. The Swahili versions were pilot-tested in Idweli prior to beginning data collection to ensure their face validity with the population where they would be used; further adjustments were then made to the Swahili versions, as needed.

Measuring Psychosocial Well-Being. Four survey instruments (described below) were selected to assess and compare the psychosocial well-being of Center children, including behavior, self-esteem and social attachments.

- Children's Depression Inventory (CDI). The Children's Depression Inventory (CDI) is a brief self-report test that helps assess cognitive, affective and behavioral signs of depression in children and adolescents 6 to 17 years old. The inventory consists of 27 items and assesses negative mood, interpersonal difficulties, negative self-esteem, ineffectiveness and anhedonia. Negative mood reflects feeling sad, feeling like crying, worrying about bad things, being bothered or upset by things, and being unable to make up one's mind. Interpersonal difficulties can

include trouble getting along with other people, social avoidance and social isolation. Negative self-esteem includes a reflection of self-dislike and feelings of being unloved. Ineffectiveness reflects a negative evaluation of one's ability and school performance. Finally, anhedonia reflects impaired ability to experience pleasure. A child who scores high on this subscale may suffer from loss of energy and problems with sleeping and appetite. The most frequently used and well-validated outcome variable for the CDI is total symptoms score. While the CDI manual describes subscales related to the components of depression, these have not been well-validated and are rarely used. The instrument has good test-retest reliability, internal consistency, and concurrent and criteria-related validity.[83] Total Idweli sample reliability (Chronbach's alpha) was 0.651.

- Social Support Questionnaire (SSQ). The team regarded a child's ability to find social support for some recurring activities of life — including those that are emotional, practical, affirmational and/or related to HIV — an important measure of psychosocial well-being. The SSQ is a quantitative and qualitative tool designed to identify who children turn to for support (e.g., biological family members, friends, teachers). It was developed by Dr. Claude Mellins and colleagues at Columbia University to work with children in the United States who have been orphaned or made vulnerable by HIV/AIDS. The SSQ, a six-item instrument, was administered through one-on-one interviews with children 7 years of age and older. For quantitative data analysis, a total score reflects the number of individuals identified as providing different types of psychosocial support (e.g., emotional, practical, affirmational) when needed.



- Strengths and Difficulties Questionnaire (SDQ). The Strengths and Difficulties Questionnaire (SDQ) - Parent Version is a brief emotional and behavioral screening instrument for children ages 4 to 11, but was used in this study for all participants, regardless of age. The SDQ consists of five subscales: emotional symptoms, hyperactivity-inattentiveness, conduct problems, peer relationship problems and prosocial behavior.[84] The first four subscales are combined to generate a total difficulties score. A supplemental questionnaire for assessing overall impact of any identified problem areas on the family was also used in the study. The SDQ takes only five minutes to administer through one-on-one interviews with a parent or caregiver. Very good reliability and validity have been established for the SDQ and it has been used worldwide, in countries in Europe, Australia, the United States, Africa and South Africa.[85]
  Total Idweli sample reliability (Chronbach's alpha) was 0.750.

- School Performance Survey. A school performance survey was designed to provide additional data, specifically focused on attendance and test scores, both before and after children entered the Center. This survey was developed by the evaluation design team and was completed by the headmaster of the village school. School attendance data and test scores for each school-age child were gathered through a review of school records for two separate time periods: before the Children's Center opened and six months later.

In addition to these quantitative measures, the project team designed qualitative measures, the results of which could be triangulated with the quantitative results to provide a more complete understanding of the impacts of the Center. Two qualitative instruments were developed by the evaluation team: the *children's sense of well-being* interview protocol and the *caring for children* focus group protocol. These, too, were translated into Swahili, then field-tested and adapted to assure understanding in the Tanzanian cultural context. Interviews and focus groups were recorded on tape and subsequently transcribed and translated into English from Swahili.

- Children's Sense of Well-Being. This survey was administered through one-on-one interviews with every child who completed the CDI and SDQ questionnaires. In these interviews, children assessed their feelings of happiness, sadness and general well-being, and provided feedback regarding what aspects of their lives they would like to change. The survey instrument developed for Center orphans was modified for use with village orphans, village non-orphans and children living in microfinance loan households.
- Caring for Children. The qualitative assessment of the issues and challenges related to caring for children was administered through focus groups. In these sessions, parents and caregivers discussed challenges and benefits related to caring for children (orphaned or non-orphaned), support needed to care for children and the extent of support they can offer to orphans in the Center. The survey instrument developed for Center caregivers was modified for use with parents and caregivers of village orphans, village non-orphans and children living in microfinance loan households. Since, in the village culture, men typically hold higher rank in mixed-gender groups, adult men and women met in separate groups so as to encourage greater participation among the women.

Measuring Physical Well-Being. The second research question addressed by the evaluation study concerned whether the physical health of the children had significantly improved since arriving at the Center.

- Physical Health Survey. A physical health survey was designed by the evaluation team. One basic measure of the children's health was used in the final analysis — the body mass index (BMI), a measure of body fat based on height and weight.[86]

Measuring Socioeconomic Sustainability. Assuming that the Center is proven to be successful in significantly improving the lives of orphaned children, is there evidence that the viability of the Center can be sustained? Through the socioeconomic lens, sustainability was considered in terms of *social* sustainability — that is, integration of the Center and its children into village life — as well as *economic* sustainability, as evidenced by contributions from villagers toward supporting Center operations.

It is important to recall that a principal justification for developing the Center was that the very high number of orphans in Idweli was stressing the capacity of extended families to care for their needs. The idea was for the Center to provide some relief for these families and to simultaneously benefit the orphans. Africa Bridge assumed that if villagers were actively included in the process of deciding how to address the orphan problem, they would develop a sense of ownership of the solution. However, if villages saw the Center as the idea of outsiders, then they would be less likely to identify with it and might be inclined to view the Center as a place to "dump" their unwanted orphans. Social and economic sustainability were assessed in a number of ways:

Evaluation of the Children's Center

- Children's Center Development Process. During the evaluation, both children and adult stakeholders involved in the Future Search process participated in focus groups concerning their experiences with the community collaboration. In these sessions, participants shared their perceptions of inclusion in the decision-making process and the appropriateness of the decision to build the Center.

The focus groups were tape recorded and analyzed to identify recurring themes, such as when participants were confident in the process, when they were most optimistic about helping orphaned village children, and when they were doubtful about the process and/or their involvement in it. The survey instrument developed for adults was modified for use with children. As with the parent and caregiver focus groups, adult men and women met in separate groups so as to encourage greater participation among the women.

- Support and Sustainability Survey — Key Informant Interviews. One-on-one interviews were conducted with key informants (e.g., village chief, ten-cell leaders, district and regional commissioners, religious leaders, doctor, school headmaster). Questions focused on perceptions of the extent of community support for the Children's Center and prospects for the Center's long-term sustainability.

- Loan Recipient Interviews. In addition to supporting orphans through the Center, Africa Bridge has offered microfinance loans to nine families in Idweli. Participants in the loan cooperative received a $500 USD loan to grow Irish potatoes as a cash crop and four months of training (finance, environmentally safe agricultural practices and marketing). Loans are expected to be paid back, so that additional families can join the cooperative. The intended purpose of the loan program was to enable families supporting orphans to increase their income.

  Eleven additional village families obtained loans from SACCOS. Unlike the Africa Bridge loans, these loans were not directly connected with supporting orphans. Individual interviews were conducted with the 19 families that had received loans through either Africa Bridge or SACCOS. Assessment included interviews with heads of household plus a housing and budget survey to determine the extent to which increased income influenced self-sufficiency, as well as what type of support and how much support these families can offer to orphans.

- Household Budget Survey. In order to compare the economic well-being of households with orphans to those without, a housing and budget survey was developed. The survey was administered at the same time that other interviews were conducted with sample households. The survey assessed indicators of a household's economic well-being, such as whether or not the household has a toilet, running water or electricity; what type of roof, floor and walls were used in house construction; what is the annual agricultural yield produced by members of the household; and other economic variables. All caregivers except those at the Center were also asked to complete a household budget survey.

Table 4. Evaluation Design

ResearchQuestion	Instrument/Measure	Sample
Psychosocial well-being of orphans	Children's Depression Inventory (CDI) — interviews	- Children ages 7 and older in all sample groups (Center, village orphans, parented children and children in microfinance loan households)
	Social Support Questionnaire (SSQ) — interviews	- Children ages 7 and older in all sample groups
	Strengths and Difficulties Questionnaire (SDQ) — interviews	- Parents and caregivers for all sampled children
	School Performance Survey — review of attendance and test scores	- School headmaster for all sampled children who attend primary school
	Children's Sense of Well-Being — interviews	- Children in all sample groups (no age criteria)
	Caring for Children — focus groups	- Male and female parents and caregivers
	Support and Sustainability Survey — interviews	- Key informants (e.g., village chief, ten-cell leaders, district and regional commissioners, representatives of Africa Bridge and Godfrey's Children, religious leaders, doctor, school headmaster)
Physical well-being of orphans	Physical Health Survey — interviews, physical measurements, medical records review	- Administered by the village physician and a medical intern
	Support and Sustainability Survey — interviews	- Key informants (e.g., village chief, ten-cell leaders, district and regional commissioners, representatives of Africa Bridge and Godfrey's Children, religious leaders, doctor, school headmaster)
	Caring for Children — focus groups	- Male and female parents and caregivers
Socioeconomic sustainability of the Center	Support and Sustainability Survey — interviews	- Key informants (e.g., village chief, ten-cell leaders, district and regional commissioners, representatives of Africa Bridge and Godfrey's Children, religious leaders, doctor, school headmaster)
	Housing and Budget Survey — interviews	- Households of all children in village sample groups
	Microfinance Loans — interviews	- Households receiving microfinance loans
	Children's Center Development Process — focus groups	- Children and adults participating in Future Search process

Data Collection

In December 2005, three senior team members conducted a six-day training workshop for 10 local Tanzanians who were being considered for positions as field workers. The curriculum included mini-lectures, discussion and role play in quantitative/qualitative data collection techniques (e.g., interviewing skills, focus group facilitation, working with both adults and children), plus a review and discussion of all survey tools and administrative procedures. An additional researcher was hired to conduct an ethnographic survey of the village.

Once all survey instruments were ready for use (January 2006), a Tanzanian field work coordinator was hired to supervise data collection in Idweli. Six field workers out of the ten trained also were hired. Input from field workers was used to further refine the instruments. Before field work began, an ethnographer spent half a day with field workers to provide them with a sense of the context within which they would be working, including a discussion of Idweli's cultural, economic and political climate. Once in the field, an additional day of training was conducted by Dr. Mahenge, a psychiatrist from the hospital in Mbeya, regarding what field workers should do if they observed trauma in a child during an interview, as the child recalled facts surrounding his or her orphanhood. Under the guidance of Dr. Mahenge, the field work team developed a safety net protocol, establishing guidelines for identifying signs of trauma, contacting a parent or caregiver for assistance, and determining whether the situation could be handled in Idweli or if the child needed to be transported to the hospital In Mbeya.

From January 2006 (eight months after orphans moved into the children's center) through May 2006, the project coordinator and field workers conducted all data collection. Field workers opened each interview and focus group with a statement describing the purpose of the study. Additionally, each participant was told that information shared by individuals would remain confidential and, if the participant felt uncomfortable at any time, that the session could be terminated. Every adult participant in the project signed a consent form; additionally, consent forms were signed by a parent or caregiver for each child.

Interviews and focus groups were conducted in Swahili. Local Tanzanians were hired to transcribe, edit and translate (from Swahili to English) more than 450 qualitative interviews.

In order to make sure that minimal errors were made in quantitative data entry, a research assistant double-checked a random sample of 50% of all interviews. Data entry was nearly perfect, with only three errors in more than 700 items.

Analysis and Findings

Findings for the four research questions are presented here starting with a review of quantitative and then qualitative data.

Psychosocial Well-Being. The first research question of this investigation asked: *Does living at the Center positively impact the psychosocial well-being of its resident orphans?*

To answer this question, data were collected using four instruments as described earlier: the CDI, measuring the intensity of the child's depression; the SDQ, measuring the child's social behavior as seen by the parent or caregiver; the SSQ, measuring the availability of social support to the child; and a qualitative interview exploring the child's life experiences and feelings about the future.

Depression. Children completed the CDI to assess the presence and intensity of depression symptoms. A one-way analysis of variance (ANOVA) was used to compare the depression scores in the four groups of children: Center children, orphaned village children, non-orphaned village children and children in microfinance loan families. (See Table 5.) This analysis reveals highly significant differences among the four groups of children in the intensity of depression

(p=0.010). Post-hoc T-tests reveal that the Center orphans are significantly different from two of the three comparison groups (village orphans and village non-orphans) and approaching significance for the third comparison group (microfinance); that is, of the four groups, Center orphans have the lowest level of depression. (See Table 6.) The average score for Center orphans was 7.37; village orphans was 11.25; village non-orphans was 9.64; and microfinance children scored 9.75. In some studies in the United States, children with scores of 12 or over are considered at risk for clinical depression.[87]

Although Center orphans report significantly fewer symptoms of depression, interpretation of this finding is limited by the fact that these are cross-sectional data. In order to determine whether residence in the Center is responsible for lower depression levels among those children, it would be necessary to have data from before the children entered the Center. These data could not be gathered because the evaluation began after children had been living at the Center for eight months. Likewise, in claiming a causal connection it would be necessary to follow these children over time.

Nevertheless, the direction of the results is clear, namely that the Center children are less depressed. Additionally, interviews with the members of the Center's governing board and its manager contained clear claims that the children selected to live in the Center were the most "needy" children of the village – those who were living in the worst circumstances and potentially most prone to depression. Rather than intensifying the psychologically debilitating effects of losing one's parents, living in the Center appears to be associated with a lower rate of depression as compared to orphans living in the village.

Table 5. ANOVA of Children's Depression Inventory (CDI) Scores

Totals	Sum of Squares	df	Mean Square	F	p
Between groups	285.089	3	95.030	3.940	.010
Within groups	3738.534	155	24.120		
Total	4023.623	158			

Table 6. T-tests of Differences Between Center Orphans and Comparison Groups for Children's Depression Inventory (CDI)

Variable	Sample Group	Mean	T (df)	p
CDI	Center Orphans	7.37		
	Village Orphans	11.25	-3.45 (72)	0.00
	Village Non-Orphans	9.64	-2.31 (105)	0.02
	Microfinance Loan Children	9.75	-1.67 (52)	0.10

Behavior. Parents or caregivers evaluated the social behaviors and emotional functioning of children in the four groups by completing the SDQ. When results were compared, several patterns were immediately evident.

A one-way analysis of variance (ANOVA) found significant differences among the four groups on all SDQ scales. (See Table 7.) Further post-hoc analysis to identify where those differences occurred was conducted using pair-wise group comparisons of the mean scores for the four groups. This analysis shows a reasonably consistent pattern. With few exceptions, the Center orphans, village orphans and village non-orphans are not substantially different from each other (see Table 8), but the children in the microfinance loan families are different. Generally, the pattern is that the microfinance loan children are seen by their caregivers as different from the Center children in both positive and negative ways. One noteworthy exception is that any noted behavior problems in Center children are seen as having a greater impact on other people around them.

The U.S. researchers thought that gender differences might explain the group differences in behavior. (Boys generally have higher rates of hyperactivity and conduct disorder than girls.) The microfinance group has slightly more boys and the Center group has slightly more girls. In order to test this hypothesis, additional analyses were run (using t-tests) to determine if there were any effects of gender on the SDQ scores. It was concluded that gender differences are not an explanation for any of the significant group differences between Center orphans and microfinance children. Additionally, no statistically significant correlations were found between age and any of the psychosocial measures, except that older children had more peer problems ($r=0.156$, $p=0.33$).

Dr. Kaaya, a senior member of the evaluation team, advanced an alternative explanation: Based on the results of a household budget survey (see Appendix 3), it appears that the microfinance group is financially somewhat better off than the other sample groups (excluding the Center children). Dr. Kaaya suggested that parents and caregivers have to achieve a certain degree of financial security before they are likely to notice the behavior of their children. Consequently, the differences picked up on the SDQ may not reflect differences in the behaviors of the children but, rather, differences in the perceptual thresholds of the adults. In other words, the results indicate that the microfinance caregivers notice both positive and negative behaviors of children in their households more because these parents and caregivers are economically better off and less distracted by the pressures of simple survival.

In conclusion, there is no clear pattern in the data suggesting that the behavior of the Center orphans, as seen by their caregivers, is different from the behavior of village orphans or village non-orphans. Since the literature review discusses the isolation and stigmatization of orphans, especially in institutional settings, the lack of significant differences in their behavior, coupled with the previously discussed finding that they are less depressed, suggests the absence of negative effects from living in a quasi-institutional setting such as the Godfrey's Children Center.

Table 7. ANOVA of Strengths and Difficulties Questionnaire (SDQ) Scores

Subscores and Total Scores		Sum of Squares	df	Mean Square	F	p
Emotional symptoms	Between groups	149.353	3	49.784	9.367	.000
	Within groups	1078.917	203	5.315		
	Total	1228.271	206			
Hyperactivity-inattentiveness	Between groups	142.638	3	47.546	7.538	.000
	Within groups	1267.782	201	6.307		
	Total	1410.420	204			
Conduct problems	Between groups	197.228	3	65.743	16.798	.000
	Within groups	790.597	202	3.914		
	Total	987.825	205			
Peer relationship problems	Between groups	249.302	3	83.101	23.662	.000
	Within groups	705.898	201	3.512		
	Total	955.200	204			
Prosocial behavior*	Between groups	292.382	3	97.461	23.353	.000
	Within groups	838.857	201	4.173		
	Total	1131.239	204			
Overall impact	Between groups	126.872	3	42.291	14.671	.000
	Withing groups	541.941	188	2.883		
	Total	668.813	191			
TOTAL DIFFICULTIES	Between groups	2826.028	3	942.009	22.815	.000
	Within groups	8216.445	199	41.289		
	Total	11042.473	202			

* The prosocial subscale is the only exception to the negative scoring scales and is scored positively so that high scores are preferable. This scale is not included in the total difficulties score.

Table 8. T-tests for Center Orphans and Comparison Groups for Strengths and Difficulties Questionnaire (SDQ)

Variable	Sample Group	Mean	T (df)	p
Emotional symptoms	Center Orphans	3.61		
	Village Orphans	3.45	0.32 (89)	0.74
	Village Non-Orphans	3.54	0.18 (146)	0.85
	Microfinance	6.47	-4.23 (68)	0.00
Hyperactivity-inattentiveness	Center Orphans	2.78		
	Village Orphans	2.49	0.60 (88)	0.55
	Village Non-Orphans	2.99	-0.49 (145)	0.63
	Microfinance	5.63	-3.76 (68)	0.00
Conduct problems	Center Orphans	1.78		
	Village Orphans	1.18	1.55 (88)	0.13
	Village Non-Orphans	1.80	-0.06 (146)	0.95
	Microfinance	4.95	-4.77 (68)	0.00
Peer relationship problems	Center Orphans	2.76		
	Village Orphans	2.35	1.14 (89)	0.27
	Village Non-Orphans	1.96	2.75 (144)	0.01
	Microfinance	5.89	-5.16 (68)	0.00
Prosocial behavior*	Center Orphans	7.88		
	Village Orphans	8.35	1.05 (89)	0.30
	Village Non-Orphans	8.17	-0.83 (144)	0.41
	Microfinance	12.21	-6.90 (68)	0.00
Overall impact	Center Orphans	2.14		
	Village Orphans	0.13	4.34 (88)	0.00
	Village Non-Orphans	0.36	5.33 (143)	0.00
	Microfinance	0.57	1.41 (55)	0.17
TOTAL DIFFICULTIES	Center Orphans	10.94		
	Village Orphans	9.28	1.31 (88)	0.19
	Village Non-Orphans	10.33	0.58 (143)	0.57
	Microfinance	22.95	-5.29 (68)	0.00

* The prosocial subscale is the only exception to the negative scoring scales and is scored positively so that high scores are preferable. This scale is not included in the total difficulties score.

Social Support. Children's social support was assessed with a series of questions measuring the types and number of people available to provide support to the child in a number of areas: emotional support, practical support, affirmational support and support related specifically to HIV. There are no differences among Center orphans, village orphans, village non-orphans and microfinance children's groups in terms of the number of people they can turn to for support. (See Table 9.) The average across all groups is close to three people.

For children in all sample groups, a friend is the person most frequently turned to for support. (See Table 10.) Not surprisingly, where the groups vary is in terms of who they turn to next after friends. Children with a living parent(s) turn next to their biological mother. Village orphans turn to older siblings, while Center orphans turn next to a teacher. It should be recalled that there are only two sets of siblings at the Center. Village orphans may consider other children in their extended family as siblings. The high ranking of teachers for Center orphans is consistent with the belief expressed in interviews (discussed later) that Center orphans see their future related to being educated.

Table 9. ANOVA of Social Support Questionnaire (SSQ)

		Sum of Squares	df	Mean Square	F	Sig.
Total number of supportive people	Between groups	6.668	3	2.223	1.372	.253
	Within groups	251.043	155	1.620		
	Total	257.711	158			

Table 10. Cumulative Count of Persons Turned to for Support as Identified on the Social Support Questionnaire (SSQ)

Person child turns to for support	Center Orphans	Village Orphans	Village Non-Orphans	Microfinance Loan Children
1st person child turns to (most frequent response)	Child friend n=90	Child friend n=62	Child friend n=109	Child friend n=28
1st person child turns to (second most frequent response)	Teacher n=31	Older sibling n=28	Biological mother n=83	Biological mother n=20
2nd person child turns to (most frequent response)	Child friend n=55	Child friend n=46	Child friend n=90	Child friend n=11
2nd person child turns to (second most frequent response)	Other n=20	Older sibling n=13	Biological mother n=34	Biological mother n=11

n = cumulative number of child responses for all six questions in the SSQ

School Performance. Data on school performance were used as an additional measure of a child's psychosocial well-being. Empirical research has found that orphanhood often results in greater absenteeism, poorer school performance and an increased incidence of dropping out of school. Data on the school performance of children in Idweli were deemed potentially useful in suggesting the condition of orphans before they entered the Center; that is, if Center children had poorer attendance and/or performance before than after, and if these improvements were noticeably different than for the non-Center groups, then the change might be attributed to living at the Center.

Analysis of school attendance data shows very few differences among the groups of children. (See Table 11.) However, one significant and one marginally significant finding did emerge. First, from January 2005 (before the Center opened) to June 2005, village orphans missed more days of school than did the other groups of children. Inferring from some patterns in the qualitative data, we suggest that this might be a result of a slightly greater tendency for village orphans to be engaged in work on the farm or in household chores. A second finding, of greater relevance to the Center's influence on the psychosocial well-being of the children, is a difference approaching significance ($F=2.150$; $p=0.097$) among the groups with respect to improvement in the terminal (end-of-the-year academic achievement) test scores. Terminal test scores are scaled from 0 to 100. Change scores for Center orphans=17.65; village orphans=10.74; village non-orphans=13.98; microfinance loan children=13.91. Although the difference between test scores is statistically marginal, the improvement in terminal test scores was considered noteworthy in Center staff interviews. No statistically significant differences between gender or age on any of the educational measures were found.

Table 11. School Performance: Attendance and Academic Achievement

	Center Orphan (n=51)	Village Orphan (n=40)	Village Non-Orphan (n=99)	Microfinance Loan Children (n=19)
Variable	**Mean (SD); range**	**Mean (SD); range**	**Mean (SD); range**	**Mean (SD); range**
Level in school	2.66 (2.06); 0-6	2.31 (2.10); 0-7	2.39 (2.26); 0-7	2.73 (2.12); 0-7
Days missed 1/6/05-6/30/05	7.50 (5.53); 1-27	12.75 (14.63); 2-67	7.00 (5.88); 1-24	6.30 (7.03); 1-24
Days missed 7/1/05-11/30/05	6.18 (4.75); 1-23	8.95 (6.06); 1-21	7.62 (5.39); 1-23	5.90 (6.61); 1-23
June 2005 terminal test	41.57 (19.98); 9-86	48.52 (20.15); 6-79	44.64 (18.99); 10-85	52.36 (18.65); 13-88
November 2005 terminal test	59.22 (15.72); 17-90	59.26 (19.62); 15-92	58.62 (17.37); 25-91	66.27 (13.84); 32-84
Change in test score	17.65 (11.87); 15-41	10.74 (10.25); 7-30	13.98 (9.74); 24-35	13.91 (9.95); 9-29

Interviews with Parents and Caregivers. In addition to the quantitative assessments of the children's psychosocial well-being, considerable effort went into obtaining qualitative information from the parents and caregivers of Idweli. Six focus groups were conducted with men and women caring for the children of Idweli:

- Female village caregivers (seven participants in one group and eight in another); all participants stated that they were caring for orphans and non-orphans in their homes
- Male village caregivers (two groups, each with six participants); all participants stated that they were caring for children in their homes, but four indicated that they did not have any orphans living in the house
- Female Center caregivers (one group with four participants)
- Male Center caregivers (one group with six participants)

The purpose of these focus groups was to gather information on experiences with caring for children, especially orphans. Participants were asked a series of questions which were fairly well standardized across all groups. Key emergent themes are described below.

Care in the past and today. There was general agreement among the village caregivers that orphans were cared for very well in the past and that, in many cases, the orphans fared better than non-orphans. However, most participants believe that, in general, orphans are not as well cared for today as they were in the past. Orphans are discriminated against by those who care for them, and village orphans (not Center orphans) are seen as different from non-orphans because of more ragged clothing and lack of cleanliness. There are many reasons for the change in how orphans are cared for, but the main reason identified by participants is that the number of orphans has increased dramatically over the years, primarily because of disease, mostly HIV/AIDS, tuberculosis and malaria. In addition, the petrol truck accident in 2000 resulted in the deaths of 42 men, creating a sudden increase in the orphan population. Compounding the impact of these challenges, focus group participants identified changes in the economic structure of society as contributing to changing social norms, including the care of children and orphans.

Interpersonal relations. Caregivers also discussed changes in the structure of interpersonal relationships. Unions or marriages between young men and women used to be planned and structured. Now, pregnancy is less planned and people engage in sexual intimacy without the knowledge or approval of others. This increases the number of children who are born into families with compromised structures.

Effects of the Center. All interviewed caregivers agreed that the lives of the children at the Center have improved since coming to the Center. They receive necessary medical treatment, eat well, have all school needs taken care of, are cleaner and stay out of trouble.

"The kids are getting better education, are obedient, looking smart and they do not move recklessly."
— Female village caregiver

"This has encouraged us because it's true that we saw that they were deteriorating. But now we haven't seen them complaining. We haven't seen them running away, or that they are not getting food, so we think at least they are in good conditions at the Center."
— Male village caregiver

Although many of the village caregivers stated that they would rather keep the orphans they are currently caring for, there was general agreement among them that, if given a choice, they would recommend that orphans be raised by the Center.

"I think it is better for the child to stay at the Center because it is calm there. If a child is from school, he can go change his clothes and start reading. He fails to find a place to roam around. But at home you find the mother has gone to take alcohol. She's from the farm, has bathed and gone to the club without caring whether the kid has eaten and that's why the kid comes from school and finds no food." — Female village caregiver

Interviews with Children. Interviews were conducted with 209 Idweli children. Not all of the interviews resulted in usable information, that is, information that could be deemed reliable. In the qualitative analysis, all microfinance children were included in their respective comparison groups (e.g., village orphans or village non-orphans).

Some children were non-responsive because they were very young and seemed to have difficulty responding to the topics they were asked about. In reviewing interview transcripts, at times a child seemed to be trying desperately to discover and then tell the interviewer what he or she wanted to hear. Sometimes the interviewer deviated so far from the interview protocol or so actively guided a child's answers that the interview as a whole could not be accepted as a fair representation of what the child had experienced. After a review of all interview transcripts with an eye toward such deviations from protocol, 28 interviews were eliminated leaving a valid sample of 181.

These 181 interview transcripts were coded by three experienced computer-assisted analysts using NVivo.[88] The broad themes (trees) that emerged from the interviews with all children in the four sample groups were as follows:

- What the child likes and dislikes about school
- The way the child experienced his/her parent(s)' death(s)
- What the child's daily activities were like before the parent(s) died
- Where the child used to sleep
- What the child's thoughts about safety used to be
- What the child felt/thought about on his/her first day at the Center
- Who brought the child to the Center
- What the child's current daily activities are
- How the child feels now
- Where the child sleeps now
- What the child's current thoughts/feelings are about safety
- What the child likes or doesn't like about his/her current living situation
- What the child would like to see change in the current living situation
- What the child sees as differences (if any) between himself/herself and the other children (in the village or at the Center)
- What (if anything) the child is troubled by
- What things make the child feel good or bad about his/her life
- Whether the child is happy or sad
- What would need to change to make the child happier
- What the child sees himself/herself doing when the child thinks of himself/herself
- What the child can do to help himself/herself achieve the future he or she wants

Each of these trees was analyzed in terms of more specific themes or "codes." For example, the children of Idweli might see themselves in any number of different "futures." Each of these distinct futures is represented by a different code. These codes are used to explore the differences in what the three groups of children (Center orphans, village orphans and village non-orphans) said during their interviews.

Chi-square analyses were performed comparing the three groups of children (Center orphans, village orphans and village non-orphans) in terms of the proportion of children in the group that did or did not express a particular code response during the interview. For example, we can tell whether or not the three groups of children differed in terms of the proportion of kids in each group that saw their future including marriage, a house, a job, or further education and study. Following are the comparisons that produced statistically significant Chi-squares. (See Appendix 5.)

- A highly significant difference (p = .000) was found in whether the children like school. Over half of the Center children said that they like school, whereas fewer than 1 in 5 of the village orphans and 1 in 10 of the village non-orphans said that they like school.
- Center orphans are less likely (p = .018) to say they like *chores or work:* 4.4% of Center orphans, 23.1% of village orphans and 9.3% of village non-orphans say this.
- Center orphans are more likely (p = .008) to say that they like everything about their current *living* situation: 80% of the Center children say this as compared with 53.8% of village orphans and 53.6% of village non-orphans.
- Center orphans are less likely (p = .011) than the other two groups to say that they wish their lives could change in the direction of satisfying current *physical* needs such as food or clothing: 13.3% of Center orphans, 30.8% of village orphans and 38.1% of village non-orphans say this.
- When comparing themselves to children living at the Center, village non-orphans are more likely (p = .023) than village orphans to say that they have everything *better than those living at the Center:* 17.5% of village non-orphans say this as compared with 2.6% of village orphans.
- Center orphans are more likely (p = .000) to *see their future* as involving education and study; 60% of Center orphans, 48.7% of village orphans and 18.6% of village non-orphans say this.
- Center orphans are more likely (p = .004) than the other two groups to say that their *future vision includes a house, money and material possessions, and good quality of life:* 46.7% of Center orphans, 30.8% of village orphans and 19.6% of village non-orphans say this.
- Center orphans are more likely (p = .020) than the other two groups to say that they can help themselves *achieve their future visions by studying:* 60% of Center orphans, 51.3% of village orphans and 36.1% of village non-orphans say this.
- Center orphans are not as likely as village orphans but more likely (p = .010) than village non-orphans to express belief that *work/career and money will help them achieve their future visions:* 20.0% of Center orphans, 33.3% of village orphans and 11.3% of village non-orphans say this.
- Center orphans are more likely (p = .001) to say they currently feel *good/happy* and/or the change since coming to their new home (the Center) is positive: 73.3% of Center orphans and 35.9% of village orphans say this.
- Village orphans are more likely (p = .019) to say they currently feel *unhappy* and/or the change since coming to their new home is negative: 12.8% of village orphans and 0.0% of Center orphans say this.

The general finding of this analysis is that where there are differences among the three groups of children in terms of what they say in the interviews, Center orphans express a more positive degree of psychosocial well-being than do children in the other two groups. This more positive view of themselves and their circumstances extends to their view of the future. They have a more positive view of their futures and they seem to have found at least one way — studying and learning — to nurture that optimism.

Physical Well-Being. In addition to evaluating the impacts of the Center on the psychosocial well-being of the children, data were collected and analyzed to answer the second evaluation question: *Does living at the Center positively impact the physical health of its resident orphans?* The principal indicator of health used was the BMI, a measure of body fat based on height and weight.

It was expected that Center orphans' average BMI would be comparable to that of the other three groups because the children living in the Center were receiving three meals a day. The evaluators hoped to be able to compare Center orphans' BMI after they had been in the Center for eight months with measures taken at the time they were admitted. However, since only weight, not height, was recorded upon admission, a "pre" BMI could not be calculated.

Since BMI is age- and sex-specific for children and teens, BMI scores from all four groups of children were converted into percentile rankings derived from the Centers for Disease Control and Prevention (CDC) BMI-for-age growth charts for both boys and girls. The mean percentile rankings for BMI are as follows: Center orphans average = 39th percentile; village orphans average = 42nd percentile; village non-orphans average = 39th percentile; and microfinance children average = 34th percentile. The average percentile ranking across groups is 39.6th percentile. (See Table 12.)

T-tests were administered, resulting in no group differences as well as means percentile rankings that are not statistically or clinically significant. (See Table 13.)

Table 12. BMI Percentile Statistics

Group	N	Mean	Standard Deviation	Minimum	Maximum
Center Orphans	48	39.15	22.93	3.00	90.00
Village Orphans	39	42.64	25.68	1.00	98.00
Village Non-Orphans	90	38.57	25.96	1.00	93.00
Microfinance Loan Children	15	37.60	29.22	3.00	79.00

Table 13. T-tests Between Center Orphans, Village Orphans, Village Non-Orphans and Microfinance Loan Children for BMI Percentiles

Variable	Sample Group	T (df)	p
BMI percentile	Center Orphans		
	Village Orphans	-0.670 (85)	0.505
	Village Non-Orphans	0.131 (136)	0.896
	Microfinance Loan Children	0.213 (31)	0.832

To get a more complete picture of the effect of the Center on the physical well-being of the children, interviews were conducted with two key informants. One was with Dr. Peter Kwita, the physician for the village of Idweli and the seven other villages in the Isongole Ward. The second was with Liz Clibourne, a public health nurse from Portland, Oregon, who was volunteering as director of the Center dispensary. With respect to the Center children, Dr. Kwita observed that:

"There is a great change now. They are okay now compared with the past. In the past they had a lot of communicable diseases, especially malaria and diarrhea. Now that is reduced. … They had syndrome of malnutrition. Now they are better. … Yes, now there is a lot of improvement because children who used to come to my dispensary are reduced in malnutrition and infection. … The children at the village still have the symptoms of infection if you compare with children at the Center.

"The children in the village get frequent infections compared to those at the Center. I think the children at the Center get more information about health compared to the children at the village."

The doctor's observations are confirmed by Ms. Clibourne, the volunteer nurse who had been at the Center since it opened. She saw the changes in the Center children occurring primarily in three areas: malnutrition, infection and upper respiratory problems.

"When they got here they were very underweight. Many of them were a little bit on the sick side — you know, infections and just the kind of things you get when you've been underfed."

In confirmation of her direct observations, the nurse offers a statement made by a villager:

"We know who the Center kids are because we can tell just by looking at them. They're neater. They're cleaner. They look happy. They look well fed. There's just a difference between the Center kids and the regular kids."

Socioeconomic Sustainability. A third evaluation question considered sustainability: *Is the support provided by and through the Center socially and economically sustainable?* Given the short period that the Center was in operation at the time of data collection, it is not possible to project its financial sustainability. However, given the largely subsistence economy of Idweli villagers, it is extremely unlikely that they could support operations of the Center on their own; the average village household income is reported to be 70 cents USD per day.[89] It should be noted that, according to the Tanzanian government's agricultural development representative in the region, Idweli is considered the poorest of the villages in the Isongole Ward.

WHO estimates that the average cost of caring for a child in East Africa ranges between 35 cents and 50 cents USD per day, [90] while Stover, Bollinger, Walker and Monasch report that the cost of supporting orphans in sub-Saharan Africa varies by age, ranging from $1.32 to $2.27 USD per child per day.[91] Center orphans receive support at a cost of $1 USD per day per child, which covers staffing, meals and shelter.

Monthly operating costs for the Center average $1,700 USD, including operating a preschool and an after-school program. Capital costs for constructing and equipping the Center, excluding volunteer labor and the donation of land, were $48,000 USD. These costs appear to be on the low side for institutionalized care of orphans, but higher (depending on whose cost figures are used) than the costs of programs designed to subsidize the care of orphans within extended families or under foster placement.[92]

At present there are no clearly articulated expectations regarding what support Idweli's villagers should provide. In determining an appropriate and sustainable level of support, it is important to recognize that the size of the orphan population in Idweli is significantly larger than would be expected in most villages because of the combined effects of HIV/AIDS and the loss of so many heads of households as a result of the petrol truck explosion. It is apparent that even if the residents of Idweli were able to provide significant in-kind support, ongoing operations of the Center will continue to require external support.

The costs of building and operating a residential facility should be weighed against the benefits to the various community stakeholder groups. The evaluation study was able to demonstrate that the Center has been successful in providing its orphans with a significantly improved quality of life. These children are demonstrating greater psychosocial well-being as compared to the other sample groups: they are less depressed, are equally well-supported from a social perspective and express a more positive attitude toward their future. Furthermore, the orphans themselves are not the only beneficiaries. Presumably, the families that might otherwise have taken them in are relieved of that financial burden and the village, as a whole, benefits in a variety of ways from the presence of a new institution providing for the needs of so many of its children.

A cost-benefits analysis to assess the total benefits to all stakeholders now — and projected into the future — would be useful in assessing benefits as compared to initial investment and operating costs. Such an analysis was not part of the evaluation, but could be included in any efforts at replicating the approach taken in Idweli. (Further discussion of what a cost-benefit analysis could include may be found in the section entitled, *Replicability: Hybrid Solutions*.)

Economic sustainability is intrinsically linked with social sustainability. Only if villagers see the Center as a part of their community's larger response to helping orphans (in the same sense as the school and dispensary, which are facilities supported with external funding) will the Center be effective in achieving the integration of orphans into the life of the village.

An evaluation of projects under the International Funds for Agricultural Development (IFAD), which has 12 programs in Tanzania, supports the point that ensuring local ownership is key to sustaining projects.[93]

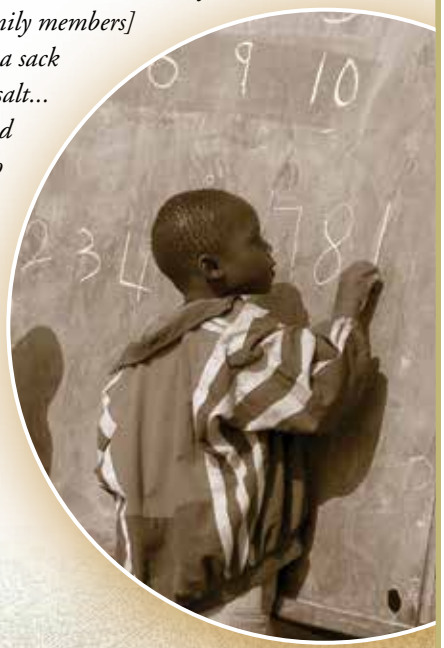
Community representatives participating in the Future Search meetings spoke about the decision-making process:

- 47% of participants felt that the idea for the Center was jointly developed by Idweli villagers and the donors. As stated by one participant: *"The idea of building the Center was from all together. It couldn't have been theirs alone or people from abroad. It's everyone's together with cooperation."*
- 29% of participants felt that the idea originated from outside (with the donors), but most of these people indicated that once villagers understood it, they embraced it.
- The remainder of participants (24%) felt that the idea was developed solely by the villagers.
- Most focus group participants remembered being engaged in some aspect of the construction of the Center.
- Respondents were proud to discuss how the villagers' strength played an invaluable role in the process of constructing buildings. *"Yes, strength, that if you converted it into money would have been a lot of money."*

The IFAD report concludes that only a minority of projects is likely to achieve sustainability. "This problem is particularly pronounced when a project has set up new organizations, using project funds to finance regular operations, but has not developed mechanisms that ensure ownership, functioning structures and procedures, continuity of staffing, and integration of the organization into a network for long-term financing."[94] Conversely, "high levels of impact and sustainability are associated with high levels of project ownership by the community and institutions concerned, and with the way in which partnerships and local stakeholders are developed and managed. This is, in turn, the product of a participatory and empowering approach to project design and implementation."[95]

Interviews with key informants probed the question about the current kinds of support the village is providing to the Center:

- Over half of respondents (n =10, 56%) indicated that villagers were currently supporting the Center. The majority of these respondents commented that most villagers give as they can and are motivated to help because they personally know children at the Center. One interviewee stated that: "*...sometimes we go to check if they got all their needs and if we see that they don't have enough food we give them some. Sometimes we have a meeting discussing about the problems facing the children and we try to make the children not feel lonely. During the harvest we give them food."*
- However, the remainder of interviewees (n=8, 44%) stated that the Center was not currently being supported by the community. Several comments indicated that the Center was not receiving contributions because people had not been educated about its advantages. *"The way I see it is that they [villagers] are not educated about the advantages of the Center. I have not seen any parents [extended family members] volunteering...giving a sack of maize or beans or salt... there are very few, and most of them [who do offer support do it] because they have children there."*



- Of those who do not see the Center being supported by villagers, there was a strong impression that the reason was a perception that the Center is controlled by donors (e.g., Africa Bridge): "*There are not any villagers contributing anything because all the contributions and work are under the donors.*"
- Several interviewees stated that since the Center opened and accepted "responsibility" for the orphans, many of the villagers had forgotten about them: *"Family members have forgotten that those children are still on their hands and that they have responsibilities for them."*

Regarding whether the level of support for the Center had changed over the six months since it opened, interviewees were fairly evenly divided between seeing a decline in support (35%), support remaining the same (35%) and support increasing (29%). Interviewees were asked to discuss what could be done to increase the level of support. The majority of respondents (55%) stressed the importance of educating villagers about the benefits of the Center and convincing villagers that the Center belonged to them and not to the sponsors:

"They are supposed to know that they own the Center. … They have just come to start it, but those who are supposed to take care of it are the community members."

"It is necessary that the village or the government of the village, call a meeting for everyone of the village so that they are educated — that we, the people like parents, should contribute anything to the Center so it at least doesn't stumble so early. … "

A few of the interviewees also shared alternative thoughts in relation to increasing community support of the Center. They focused more on the production of goods and services. For example, respondents identified the need to produce and maintain farms that could help provide food to feed the children residing at the Center. Other interviewees thought villagers could further support the Center by providing services such as cooking and cleaning.

When asked to focus specifically on the long-term sustainability of the Center over the next five to 10 years, there was general consensus among interviewees that the village would have a very difficult time sustaining the Center after donors have completed their tenure. This concern was linked both to a lack of stable financial resources and education among the villagers about how to manage such a facility.

"We can't do without them, so that means we will be forced to take the kids back to their homes, and that is not a good thing at all because the kids already started living in a good environment and good life. It is not a good thing at all, because it's like we are sending them back."

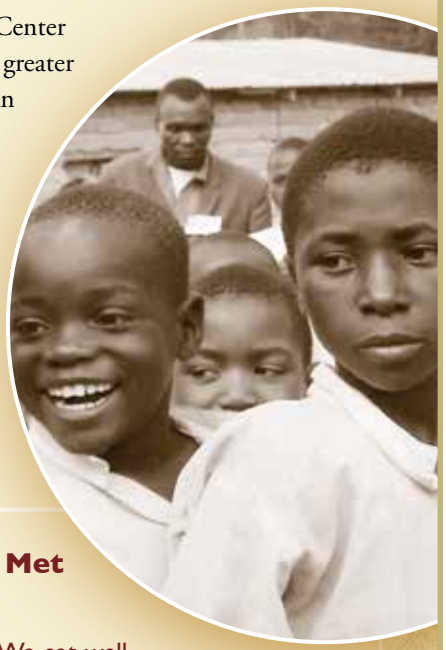
In conclusion, interviewees thought that the village, including the leaders, needed to come together to form a solid force to deal with sustainability issues. Without a cohesive group of individuals, key informants foresaw problems in the village's ability to effectively lead the Center if donors withdrew. Clearly, assessing the socioeconomic stability of the Center will require tracking over time.

General Conclusions

The literature review section of this report pointed to the paucity of empirical research into the effectiveness of alternative support arrangements for children orphaned or made vulnerable by HIV/AIDS. The current study was designed to help remedy that situation by providing a detailed evaluation of the children's center in Idweli and by demonstrating the applicability of selected measures used to assess the psychosocial and physical well-being of OVC.

Effectiveness of the Godfrey's Children Center. The evaluation study set out to determine whether the children's center in Idweli was improving the psychosocial and physical well-being of its orphans. The results of the study indicate that the Center is having a positive impact.

- On a widely used and validated measure of depression (CDI), Center orphans reported significantly fewer symptoms than either orphans living in the village or children living with both parents.
- The emotional and functioning behaviors of children, as reported by their parents and caregivers (SDQ), were not significantly different across comparison groups, suggesting that the Center does not negatively impact the children. In fact, the behavior of children living in the Center appears to be better than children living in households receiving microfinance loans.
- There were no differences among Center orphans, village orphans, village non-orphans and microfinance children's groups in terms of the number of people they can turn to for social support (SSQ). All four groups turn to friends for primary support, but Center orphans turn to their teachers next while parented children turn to their biological mothers and village orphans turn to siblings.
- Interviews with caregivers indicate that Center orphans appear to be better taken care of than village orphans, but the caregivers recognize that the ability of the village to care for its orphans in general is not as strong as it once was.
- Measures of school attendance and performance show that school attendance for Center orphans is comparable to the other comparison groups, except for village orphans, who have a poorer record of attendance. Regarding school performance as measured by terminal exams, there is a marginally significant difference between groups, with Center orphans scoring slightly higher than the other groups.
- During interviews, Center orphans were more likely to express a more positive sense of well-being than were village orphans or village non-orphans.
- During interviews, Center orphans expressed a greater liking for school than did children in the comparison groups, and Center orphans were more likely to see their future as involving knowledge, education and study.



Physical Needs Met

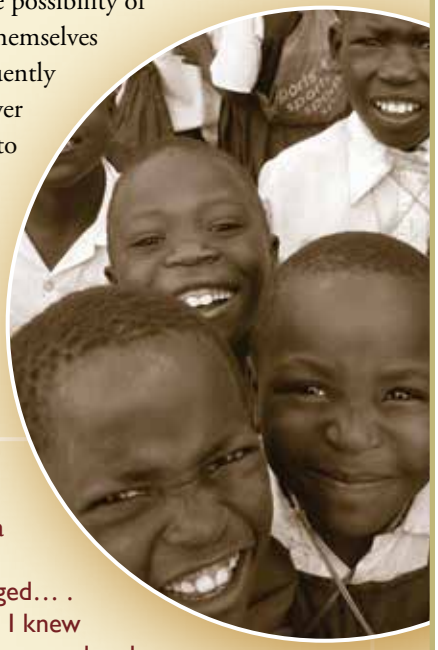
- This place is nice. We live very nicely. We eat well.
- I was not bathing and I had no shoes.
- Others who are living at the village are dirty, but we are neat.
- I have changed healthwise. …I was so thin at home.

- The Center appears to be becoming more socially integrated into the life of the village. Most Center children visit family on weekends, and non-Center children attend preschool and after-school classes there. Adult caregivers express continued strong support for the Center as a solution to the needs of at least some of Idweli's orphans.

Factors Leading to Success of the Godfrey's Children Center

In partnership with several NGOs, the village of Idweli was able to significantly improve the well-being of its neediest orphans. Combined quantitative and qualitative data suggest that Center orphans are less depressed; healthier; equally connected to others who can provide social support; believe they have a better life with more of their basic needs fulfilled; like school more; think of their futures more in terms of knowledge and education; and are viewed by many of the village informants as "better off" than the other village children. These, and other preliminary findings, form a pattern that goes beyond any single result, collectively suggesting that the Godfrey's Children Center provides a significantly improved quality of life for the orphans it serves.

Three factors emerge from the evaluation research which, in combination, seem to account for the findings summarized above. First, the Center orphans do, indeed, have their basic **physical needs met.** Food, shelter, clothing and healthcare are provided by the Center. That is an unusually strong foundation for OVC in sub-Saharan Africa. Second, the Center orphans are central to a **social process** that has, literally, changed their lives. They were involved directly or through representatives in a historic village-wide decision to do something significant about their plight and the village-wide effort to build the Center. They were selected by a governing board of village adults to live in the Center. The Center became integral to village life. Rather than being stigmatized, Center orphans are envied by many of the other village children. Thus, in addition to improvement in their physical well-being, their socio-emotional well-being has been bolstered. Third, their **view of the future** has been influenced. They live in a setting where education is valued. Their adult caregivers also serve as teachers and mentors. Other village children attend preschool in the Center. The Center orphans see the possibility of a different future for themselves and they are told frequently that they have the power to move themselves into this future.



Social Process

- Life has changed in a good way. … Everything has changed… .
- I was happy because I knew at least now there are people who will support me.
- Uncle [Damas - Center manager] takes care of all of us. …he asks if you are sick…or if you have problems.
- …they come to ask you when you are sad. … Why are you sad? …When you tell them…they will tell you just life that [is] those things which have passed.
- If I am worried he [Center staff] comes to comfort me and give me heart. Then I take heart. We are all on good terms. …We cooperate in every work.

These three factors are creating genuine life-altering experiences for Godfrey's Children Center orphans. While these results are promising, there is a need for continued evaluation of the psychological health of OVC living at the Center, in comparison to those children living in the village, to ensure that these initial gains are sustained.

Lessons Learned from Conducting the Evaluation. In addition to evaluating the impacts of the Center on the orphans of Idweli, this study was designed to develop lessons about the process of conducting an evaluation of a support facility for orphans in a similar setting. More specifically, it was designed to select, modify and test measures of psychosocial well-being that could be used in a similar setting. As evident in the literature review, relatively few scientifically designed and implemented studies of this kind have been conducted anywhere in the world. Consequently, the fourth question of this evaluation study was: *What is required to scientifically evaluate a community-based intervention such as the Children's Center?* Several conclusions have been drawn by the research team:

- Working with a multicultural senior research team provides an effective way of achieving a robust research design because of increased cultural sensitivity and a broader perspective in understanding behaviors and norms in Tanzania.
- Several carefully selected instruments already widely in use with children in developed nations seem to translate with little difficulty to a rural sub-Saharan setting. Nevertheless, researchers should carefully field-test instruments to assure that they are culturally appropriate in any new setting.
- It is useful to triangulate quantitative with qualitative data to ensure a robust interpretation of findings. However, the collection of qualitative data proved to be more challenging than administering quantitative instruments. This experience demonstrates the need for a more rigorous training of field workers in the protocol and especially in asking open-ended questions. Close and ongoing supervision of field workers and a review of data as it is being collected could help alleviate this deficiency.
- In qualitative interviews, although children did not provide rich descriptions of their experiences, their more abbreviated responses did produce useful information regarding their everyday lives and perspectives on the future.

View of the Future

- What I like is the education, what they (Center staff) teach us. …They teach us not to be thieves…not to despise people. … We should work heartily…and study hard.
- In my life I want to be educated. … I want to have my own job. That will help me to support my children. … I have to study…I have to be faithful…and do what they tell me to do. … I will be a teacher.
- I felt good…because I knew I was going to build my life at the Center…in education.
- I don't beg from anyone…and make my own decisions, and then I will be happy. I have to study. I am faithful and don't like lying. … I like myself.

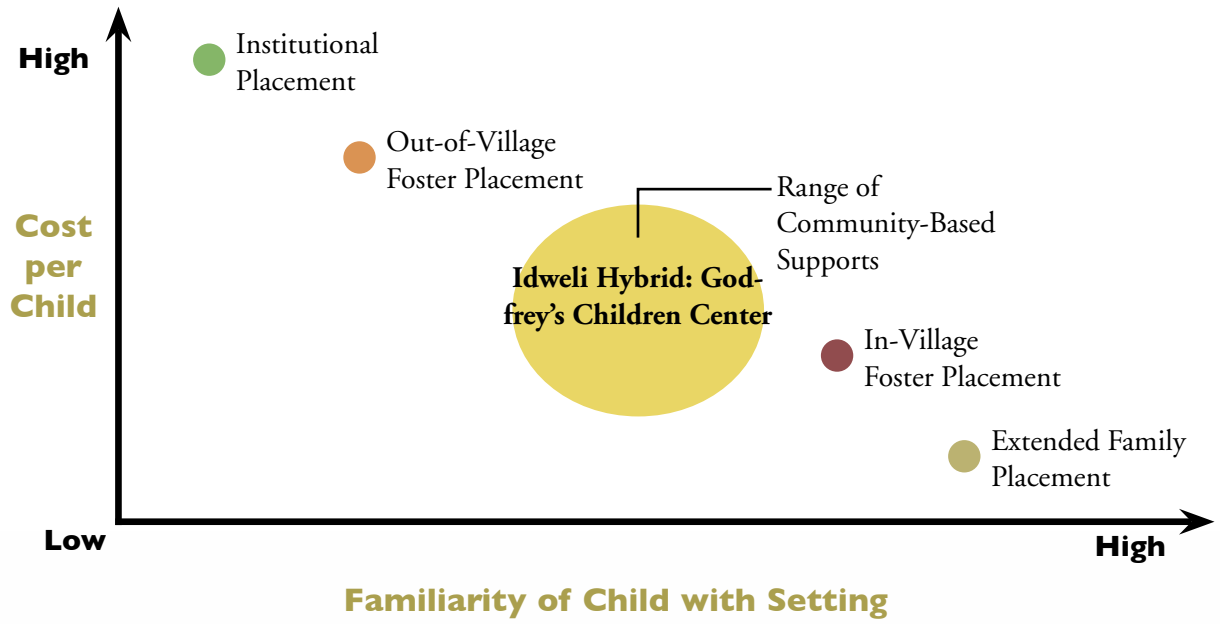
Godfrey's Children Center in Relation to the Continuum of Care

The challenge posed by the enormous and growing number of children orphaned by HIV/AIDS in sub-Saharan Africa exceeds the coping capacity of traditional forms of support. Extended families, many already living at a subsistence level, cannot effectively absorb the additional burden. Likewise, the option of fostering orphans with non-family members is not proving adequate and may actually promote the economic exploitation of orphans. Institutionalization is a costly alternative and one with many potentially negative impacts on children. "Community support" programs that assist households (extended family and non-family) in caring for orphans offer a promising alternative, but one whose implementation and outcomes are not yet fully understood.

The children's center in Idweli is a hybrid alternative combining elements of community-based support and institutionalized placement. The development of this hybrid has served, in effect, as a natural experiment:[96] a community-based process determined that a children's center would be an effective response to the needs of orphans in the community. The Center provides shelter for about 20% of the village's neediest orphans, thereby reducing some, but hardly all, of the burden of supporting orphans. The children living at the Center have daily opportunities for keeping their lives integrated with family members and their community. Likewise, because the Center also serves the children of Idweli with preschool and after-school classes, it is becoming more truly a center for children and not an orphanage.

Figure 4 shows the Godfrey's Children Center along a continuum of care alternatives (presented earlier in the literature review section of this study). The support alternative favored by policymakers and child advocates is to place children with extended family members. Part of what makes such a placement beneficial is that children maintain familiar social networks. Since the Center is located in the village where all of its orphans are from and where many still have family, it allows the children to maintain their social contacts in ways that traditional institutionalization does not. Although the Center may be considered by some to be a more expensive alternative than supporting children living with extended family members, there appears to be agreement that it is significantly less expensive than traditional institutionalization, though it provides far greater benefits. Another important aspect of the hybrid nature of the Center is that the decision to build it was made by the people of Idweli, and they retain significant control over its governance.

Figure 4. Godfrey's Children Center in the Continuum of Placement Alternatives



In general there are very few scientifically designed and conducted evaluations upon which to base policies and actions for addressing the needs of HIV/AIDS orphans. Most of the research that has been conducted to date documents the needs but not the responses. A principal objective of the present study was to add to the empirical knowledge about measuring the psychosocial well-being of OVC, specifically in the context of a support setting such as the Center. Based on the evaluation presented here, the Center appears to enhance the physical and psychosocial well-being of its children. There is also evidence that the Center is becoming integrated into the life of the village.

Sustainability

When the issue of sustainability is discussed in terms of something like the Godfrey's Children Center, it is often considered in economic terms: "Can this thing grow its own legs?" Such a narrow perspective (economic) obscures the equal, if not greater, importance of achieving social sustainability. Will the community want to own and look after this new institution? As suggested earlier, it is not reasonable to assume that the people of Idweli will ever be able to raise the funds to support the operating costs of their Center. Outside sources will have to continue providing financial support, though those sources might change over time. That acknowledged, the critical challenge is to assure that the Center is socially sustainable. In addition, it is important to maintain ongoing technical support for villagers who do engage in maintaining operations of a new kind of institution such as the Center.

Implications of the Idweli Approach

Building Social Sustainability. The 2004 evaluation of 12 Tanzanian projects supported by IFAD (total cost: $489 million USD) focuses on social sustainability of the projects.[97] The evaluation found that the conduct of many projects "ignore(s) or bypass(es) existing social mechanisms, institutions and structures...as a consequence, many project-specific institutions are unsustainable, especially those without a clear economic raison d'etre."[98]

The IFAD evaluation suggests that one important foundation of future sustainability can be established through the process by which projects are designed and implemented. "An effective and empowering participatory process can increase impact and sustainability. Many projects lack this, despite a commitment to participation in project design. Such a commitment needs to be matched by resources and systematic support during implementation, and tempered by recognition that changing non- participatory attitudes and structures takes time. Project designs need to be realistic about the pace of and potential for change."[99]

All of these points seem to confirm a conclusion drawn from the Idweli evaluation; namely, that using a highly participatory approach — such as Future Search — is essential to engaging the community which must ultimately claim ownership of the institutions and programs that are developed. Supporting this conclusion, the IFAD evaluation states that: "Ensuring local ownership, with adequate attention to user groups, is the key to sustainability. Ownership can be fostered by the delegation of decision-making power, supported by training and capacity building."[100]

In a project such as the Godfrey's Children Center, expectations about community support or buy-in should be discussed with various village stakeholder groups (e.g., children, women, spiritual leaders, politicians) before the visioning process commences and again at critical phases of a project, such as implementation. Although it is important to have a process that develops and defines community involvement, that process may be different for each phase. The Future Search process employed in Idweli worked well in engaging stakeholders in the decision to develop the Center. However, after that process ended, villagers were unaware of an ongoing responsibility to support construction and operations of the Center. Had villagers been more engaged in the implementation phase of the project (e.g., construction and outfitting of the Center), the Center would have opened sooner, and the villagers may have experienced a greater sense of buy-in to support ongoing operations.

The Center appears to be becoming more socially integrated into the life of the village. Some Center children visit family on weekends, and non-Center children attend preschool and after-school classes there. Adult caregivers express continued strong support for the Center as a solution to the needs of at least some of Idweli's orphans.

Providing Ongoing Technical Assistance. Community-based projects are often fragile, even under the best conditions — no less in the challenging conditions of rural Tanzania. To help assure project sustainability, it is important to provide technical assistance appropriate to local skill sets at all phases of a project (visioning, planning, implementing, operating and sustaining). Such assistance is obviously needed regarding matters such as management and budget, but it is equally important in terms of assuring that local governance of an institution such as the Center is maintained with full engagement of all segments of the community. Since the governing board was set up to provide representation for the key stakeholders in the community, it would be useful to have ongoing technical assistance that helps board members understand their roles and responsibilities. Such training would be particularly useful for women

and adolescents on the board, since traditionally these individuals have not played a role in village decision making.

The importance of providing ongoing technical support was recognized by the Thandanani NGO in South Africa (mentioned previously in the literature review section of this report). Thandanani has a program to set up local volunteer committees to keep an eye on needy children in townships and semi-rural areas. These committees are essential to achieving local buy-in, but they are difficult to establish and maintain. Emma Guest observes, in *Children of AIDS* that "NGO workers can't just march into a community with their facts and figures and progressive ideas. There are ways to gain acceptance."[101]

Once established, projects like these need ongoing support. Linda Aadnesgaard, director of Thandanani, underscores the challenge: "The first two years were a complete nightmare. ...There have been incredible learnings, but also within those learnings, a lot of negatives because you realize there are no quick, easy solutions."[102]

Guest adds, "Even if a project's aims are carefully explained, many participants still assume that they are about to receive handouts. When they don't, they're disappointed and some committees fold. Volunteers find jobs, move away, lose interest or bicker."[103]

A subtle but important area in which to think about technical assistance is in maintaining and reinforcing the informal supports provided by friends. Data from the SSQ employed in the Idweli evaluation show that major support for orphans, and for all village children, comes from friends. Just as many HIV prevention programs emphasize peer-to-peer support systems, when thinking about support for orphans, ways of reinforcing peer-to-peer supports should be considered.

Replicability: Hybrid Solutions

Evaluation findings presented here indicate that the Godfrey's Children Center has been successful in providing significant psychosocial and physical benefits for its orphans. Assuming that the Center can be sustained and can continue to support healthy childhoods, can and should it be replicated elsewhere? Typically, replication is thought of in terms of taking a solution that has worked in one setting and recreating it in another. This could be interpreted as developing something very much like the Godfrey's Children Center in other villages (e.g., the facilities, staffing, programs), but such an interpretation would miss the point about what appears to make the Center work. The Center came about through a highly participatory process. When addressing OVC issues in other communities, it is important to focus on the following key questions: *Is it necessary that a development process similar to the one used in Idweli be incorporated when replicating the project elsewhere? How important is collaboration among NGOs in replicating a similar project? What range of alternatives might exist as hybrids and how can they be established so as to ensure accountability? What level of financial support beyond average costs is justifiable?*

Importance of Replicating the Process. Regarding the question about whether replicability should include something like a Future Search process, the answer seems to be yes. As suggested in the IFAD evaluation, employing a highly participatory process in project design and implementation helps ensure social integration and sustainability. The Future Search process seems to have had many downstream benefits that have led to the apparent success of the Center. It empowered women and children in decision making in a very non-traditional way. By giving them voice at the outset, the idea for the Center was able to win support over other alternatives that stressed economic development with little

focus on children. The process also helped establish community buy-in for construction of the Center and, ultimately, for its ongoing governance.

It is probably not necessary to specifically employ the Future Search process. There are many alternatives that can achieve a similar effect in terms of broad participation and consensus building. However, utilizing some such process seems to be important. Without it, villagers might very well perceive whatever proposals are presented as being from outside and, therefore, the ongoing responsibility of outsiders to sustain them.

Importance of Collaboration Among NGOs. If Guest's account in *Children of AIDS*[104] is any indication, there are probably hundreds, if not thousands, of small, largely localized NGO efforts such as the Godfrey's Children Center developing to address the needs of orphans in sub-Saharan Africa. Although such efforts seem to have a good chance of being truly responsive to local needs, they seem to fly below the radar. Meanwhile, international donors who desire to address these needs often find it difficult to access and develop an emerging grassroots support system.

One of the lessons that can be drawn from the Idweli experiment is that NGO-to-NGO collaboration provides a viable way for connecting needs with resources. NGOs and donor community members possess the capacity to enrich the physical and economic well-being of OVC, but at the same time must exercise cultural sensitivity in order to be respectful of the children, promote cooperation of local community members and thus improve chances of integration of the children at facilities such as the Godfrey's Children Center with the local community.

It was almost by accident that people from Godfrey's Children connected with Africa Bridge in a way that made the Center possible. It was equally fortuitous that Africa Bridge contacted the Lundy Foundation to partner with it in the development process and that Lundy subsequently was granted funding to conduct an evaluation. It was fortunate that this mix of NGOs provided access to foreign funds and culturally sensitive expertise and local social connections. If something like the Godfrey's Children Center were to be replicated elsewhere, these kinds of critical connections cannot be left to chance.

Creating Hybrid Alternatives and Assuring Accountability. The Center in Idweli represents a specific hybrid — one with a very strong residential component. Hybrids in other communities may have a much smaller residential component, while doing more to support orphans in their homes. For example, support could be provided through microfinance loans such as those offered by Africa Bridge to families in Idweli with orphans living at home. What seems to be critical is that hybrid solutions grow out of the specific needs and capacities of individual communities as determined by those communities through a participatory decision-making process.

Likewise, it is important that such hybrids build on mechanisms of accountability that are already employed in communities. A good example of this is offered by a program developed by SWISSAID to support the Upatu system of making loans. As described earlier in this report, an Upatu in Tanzania involves 10 to 20 women forming a group to which each woman contributes and from which each may borrow. This type of loan making appears to have a great deal of transparency. Furthermore, it seems to build on as well as reinforce social capital networks.

In recent years, many Upatu have been reaching the end of their financial means as young parents die of AIDS and leave numerous orphans behind. SWISSAID developed a program to try to reinforce the failing Upatu system. Since Upatu funds to care for AIDS orphans are often lacking, SWISSAID decided to stock them up and provide the women with more money for their small businesses. This

not only benefits the women directly by increasing their income, it also benefits the AIDS orphans, who receive a part of the women's earnings.[105]

One of the apparent challenges in effectively implementing any locally based program is assuring accountability. In Idweli, one critical test of accountability came in the selection of orphans for the Center. There was concern on the part of the sponsoring NGOs that placements at the Center should go to the neediest orphans. This was achieved. But the Africa Bridge microfinance loan program that was intended to increase the financial capacity of families supporting orphans in their homes was not similarly successful. Most loans were given to families without orphans; the selected families were not among the neediest; and many villagers seemed to have been unaware of the program's existence and how they might have participated in it.

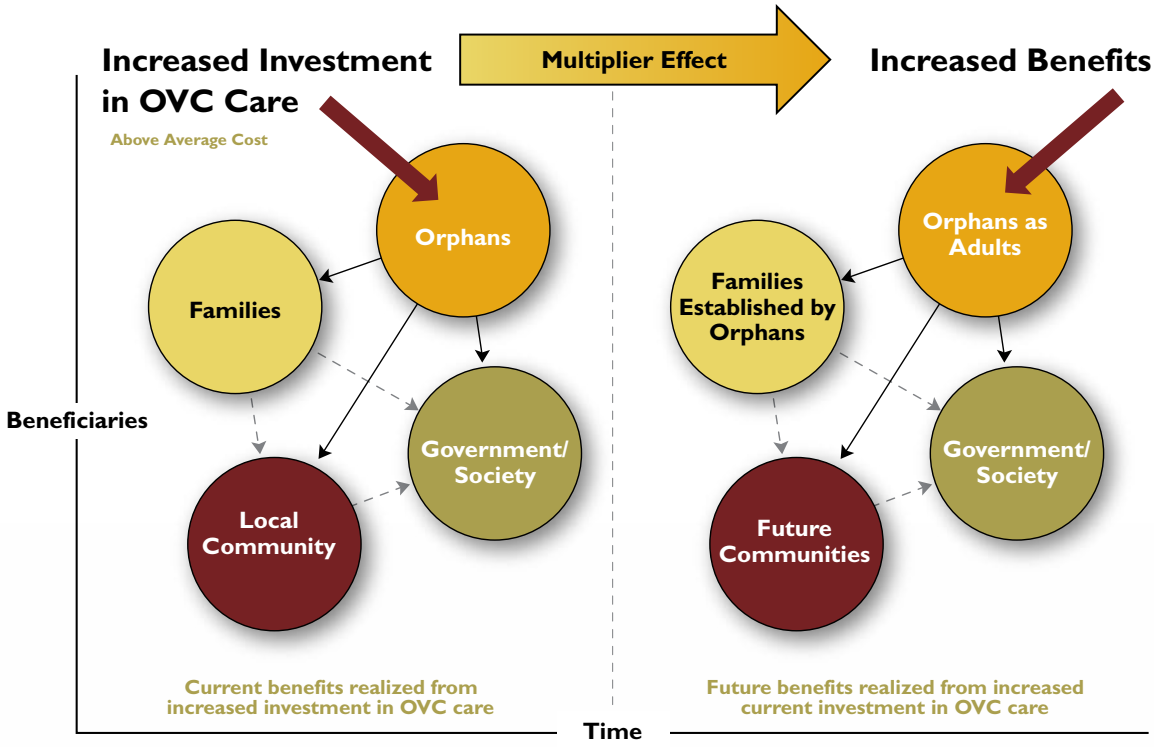
As suggested by the Idweli experiment, hybrid solutions may create greater challenges for assuring accountability for program funds and activities. Consequently, thinking about how to achieve accountability must be part of the earliest discussions about how a community hopes to respond to the needs of its OVC.

Justifying Expenditures Above Average Costs. The Godfrey's Children Center — a hybrid, community-based alternative — is supporting orphans at a cost per child that may be higher than the cost of maintaining these children in an extended family. Other hybrid, community-based alternatives developed through a replication effort might cost less than Idweli, but might still exceed the average costs of caring for OVC. It should be noted that a recent study of the costs of supporting orphans in Tanzania, which surveyed 227 sites serving a total of more than 50,000 orphans, found that the average cost of simply providing one hot meal per child each day was $1.01 USD — equivalent to the total cost per day of supporting a child at the Godfrey's Children Center.[106] In considering replication, can expenditures above the average costs of supporting OVC be justified, especially when there are millions of OVC in need of assistance?

Arguably, some level of increased expenditure above the average is justified on the basis that orphans often require more support than children living at home with both parents. For example, simply giving a woman who has taken in her orphaned grandchildren a subsidy to provide support at the level of average costs would not recognize the additional psychosocial and economic burdens placed on her household. Evidence of the impacts of such additional burdens is provided by the Idweli evaluation. Village orphans, who presumably are supported at the average cost level, were significantly more depressed than Center orphans and they missed more days of school. Furthermore, village orphans were perceived by other villagers as not being as well cared for. An additional finding indicates that in contrast to the village orphans, Center orphans expressed more positive attitudes about their future and felt less stigmatized by their situation. Such findings suggest that significant benefits can be realized with a higher level of expenditure for OVC care.

Returning to the question of replication, higher costs for the development of hybrid alternatives (such as the Godfrey's Children Center) could be justified by the promise — and then the measured attainment — of higher current and long-term benefits. An in-depth analysis of actual current and long-term costs and benefits was not within the scope of the Idweli evaluation, but should be included in any future projects designed to encourage the development of diverse hybrid solutions.[107] Analysis should incorporate the following factors: determination of the costs associated with an increased up-front financial investment in OVC care;[108] identification of all potential benefits/returns that would be realized by society now and in the future; determination of the multiplier that is the ratio of benefits to investment (e.g., a multiplier of "2" indicates that every additional dollar invested returns

Figure 5. Increased Investment in OVC Care and Long-Term Benefits



two); determination of the specific multiplier that would result in a return on investment (ROI) acceptable to donors and policymakers.

Determination of current and long-term benefits would need to consider the full range of stakeholders (e.g., orphans, families, community, government, society at large).[109] (See Figure 5.) Some of these stakeholders are direct beneficiaries of the additional investments in OVC care, while others receive indirect benefits (avoided costs). For example, the orphans themselves are direct beneficiaries, as they are housed, clothed, fed and schooled. The families who otherwise would have sheltered them are indirect beneficiaries; having the orphans cared for relieves these families of burdens that, otherwise, they would have had to assume.

Some of the benefits are received now, while others will be realized in the future. For example, the fact that orphans are remaining in school is a current benefit, while the increased earnings they may realize as adults, because they have had this opportunity, would be a future benefit.[110] (Table 14 depicts some of the potential benefits that could be received by each key stakeholder group.)

Table 14. Stakeholders and Potential Benefits Associated with Increased Investment in OVC Care

			Benefits/Returns	
			Current	Future
Stakeholders	Orphans	Direct	• Improved physical and mental health • Remaining in school	• Improved physical and mental health as adults • Increased earnings as adults • Higher likelihood of successful marital relaltions • More capable of effectively parenting their own children
		Indirect (avoided costs)	• Reduced incidence of self-destructive behaviors • Reduced impact on social justice system	• Reduced demand for physical and mental health services • Reduced likelihood of HIV transmission (if sex education is part of an intervention) • Reduced likelihood of involvement in crime • Greater likelihood of social integration and marrying within their villages • Reduced domestic violence • Reduced probability of dysfunctional parenting behaviors • Reduced probability of divorce and family breakup
	Families	Direct	• Caregivers are relieved of the burden of supporting an excessive number of orphans and, therefore, can be more economically productive	• Greater financial security
		Indirect (avoided costs)	• Families are better able to care for their own children • Families are better able to care for aging parents	• Traditional methods by which families cope with their needs are not irreparably broken by the strain imposed in caring for OVC
	Communities	Direct	• Communities have improved problem-solving and governance skills, as a result of participating in a process to address the needs of their orphans and in implementing the resulting intervention	• Communities are able to apply enhanced problem-solving skills to other challenges
		Indirect (avoided costs)	• Health, education and social welfare institutions are not overburdened • Socially disruptive behavior by orphans is reduced	• Communities are in a better position to meet their economic needs through an expanded tax base • More heads of household are educated and in good health, thus poverty is lessened

(continued on page 63)

Table 14. Stakeholders and Potential Benefits Associated with Increased Investment in OVC Care (continued from page 62)

Stakeholders		Benefits/Returns		
			Current	Future
Government/Society		Direct	• Donors are more willing to provide financial support when local governments increase spending on OVC care	• Work force is more productive (increased gross domestic product) • Society is less depressed, more optimistic and, therefore, more capable of creating and implementing social and economic programs • A more effective and better networked NGO community becomes more capable of addressing a broad range of problems
		Indirect (avoided costs)	• Orphans are less likely to migrate to urban areas where they may engage in criminal and sexually risky behaviors	• Demand for physical and mental health care is reduced • The rate of sexually transmitted diseases is reduced because orphans have been effectively supported and have not resorted to sex work to support themselves • Crime rates fall • The tax base is expanded as communities are in a better position to economically meet their needs

Furthermore, future benefits include avoided costs (i.e., reduced negative externalities). Negative externalities include such social costs as higher rates of criminal behavior; increased domestic violence and child abuse; increased unemployment; increased use of drugs and alcohol; risky sexual behavior resulting in higher rates of HIV transmission; and poorer physical and mental health, resulting in increased use of public services. Orphans who might otherwise turn to crime to support themselves as adults are better equipped to find legitimate employment (because they have been educated), thus potentially reducing the burden on the criminal justice system.

Some of these costs have been estimated through longitudinal studies in England focusing on children and adolescents diagnosed with depression,[111] which is a common symptom of orphans. When children exhibited antisocial behavior in addition to depression, negative social costs incurred in their adulthood were 10 times higher than for those individuals with no problems. Crime generated the greatest cost.[112] Individuals who received support in their orphanhood are less likely to suffer from ongoing mental depression and, therefore, are more likely to demonstrate greater productivity in adulthood.[113]

Using a panel study design, Kathleen Beegle and her associates were able to distinguish specific characteristics of orphanhood associated with the greatest negative future outcomes. These researchers report finding "strong effects of …orphanhood on

education."[114] Research indicates that a significant future benefit of investing in orphan care is increased adult earnings, made possible by helping OVC remain in school. A review of the literature on returns on investment in education by Psacharopoulos and Patrinos concludes that: "Overall, the average rate of return to another year of schooling is 10%. …average returns to schooling are highest in the Latin American and Caribbean region (12%) and for the sub-Saharan Africa region (11.7%)."[115] A longitudinal study by Beegle and associates confirms this finding in their analysis of the long-term impacts of orphanhood in the Kagera region of northwestern Tanzania.

Returning to the specific case of the Godfrey's Children Center, are higher costs justified? The Idweli research team believes that the preliminary answer is "yes," because current benefits are being realized by the children and other key stakeholder groups. Children at the Center are demonstrating overall better psychosocial and physical well-being, which, according to the literature, should correlate with becoming healthier adults with greater economic productivity, better family stability and greater connection to the social fabric of their communities.

In summary, a decision to replicate the development of hybrid placement alternatives, such as the Godfrey's Children Center, would benefit from careful analysis of both current and future costs/benefits to diverse stakeholders. Through such analysis, a determination could be made regarding an appropriate level of additional expenditures for OVC care.

Research and Evaluation

There is a dearth of empirical studies upon which to base major funding decisions in support of the needs of children orphaned and made vulnerable by HIV/AIDS. As a contribution toward filling that gap, the current study demonstrates the applicability of existing instruments (e.g., CDI, SDQ, SSQ) to evaluate both the needs of OVC and the effectiveness of interventions — such as the Godfrey's Children Center — designed to support them. There is an ongoing need to validate psychosocial measures for future use in Tanzania and elsewhere in sub-Saharan Africa. Interpretation of findings from such measures benefits from research designed to triangulate quantitative and qualitative data. The latter is difficult to obtain, but essential to robust evaluation.

If the donor community feels that community-based and hybrid supports are a good way to position future investment, it is essential that further research be conducted on these alternatives. Studies such as the one conducted in Idweli should be replicated elsewhere in sub-Saharan Africa where community-based and hybrid solutions are already in operation. In addition to comparative studies, it is essential to support the collection and analysis of longitudinal data. Without such data it is impossible to tell whether projects that are promising in their early results are being sustained over time, or even if they mature into more interesting and effective solutions.

A systematic program for the evaluation of hybrid alternatives could employ a *collaborative approach* to the design of measures, so as to more effectively capture the qualitative experiences of children and adult caregivers. This approach would capitalize on the expertise provided by a multicultural team of researchers, but also would elicit the input and support of representatives of the community being studied. Collaborative approaches to evaluation are being used successfully in connection with a variety of community-based initiatives in the United States and other parts of the world.[116]

There are at least two areas where collaborative evaluation might be especially beneficial: first, in terms of obtaining reliable information from young children and, second, in obtaining a clear understanding of the effectiveness of the visioning, planning and development processes. The Idweli evaluation encountered difficulties in obtaining reliable information from young children through the qualitative evaluation process. The children's reticence in speaking or sharing their feelings with outside evaluators might have been

overcome if villagers, including older children, had been engaged in deciding how best to structure and conduct these interviews.

Additionally, a collaborative approach to designing and conducting evaluations would lend further support to the goal of involving communities in developing strategies for responding to the needs of their OVC. Process evaluation, such as that incorporated in the Godfrey's Children Center study, examines factors such as how clearly various stakeholders understood the needs of their OVC at the outset of the project and how this understanding changed over time; how decisions were made to develop an alternative solution; how the project was implemented; who was involved at the implementation stage of the project; and how the project was managed. Ideally, process evaluation should commence early in the development stage of a project and be used as a means of providing feedback to individuals participating in the process.

It is important to emphasize again that the study presented here does not conclude that the evident short-term success of the Godfrey's Children Center provides the basis for its replication in other communities. Rather, the conclusion that should be carried away from this study is that hybrid, community-based solutions — such as the one developed in Idweli with strong local participation — offer a promising alternative response to the growing challenge of OVC in Africa. There is no one solution, but a broad range of possibilities that can be nurtured at the community level. With billions of dollars committed to address the impacts of HIV/AIDS in Africa, there is a very shallow foundation of empirical knowledge regarding where and how to invest funds intended to improve the lives of children orphaned by this epidemic.

Realizing that promise will require a different kind of partnership between donors and communities. Donors must be willing to allow for significant local variation in programs, while communities must be willing to fully participate in the design and operation of programs and simultaneously hold those programs accountable for producing results. This is not an easy partnership to forge. It requires trust, capacity building and a willingness to learn while doing. It might seem, in light of the growing numbers of orphaned and vulnerable in Africa, that the pace of such an approach would be too slow, but as community development specialists have known for decades, sometimes it is necessary to go slow in order to move fast.

Recommendations to Key Stakeholders

In seeking effective ways to meet the needs of a growing OVC population, specific stakeholder groups may want to consider the implications of the Idweli evaluation findings as they continue to do their vital work in the area of OVC care. It may be useful to direct suggestions to specific stakeholder groups; these groups include: (1) *local and international NGOs* that engage in the work of implementing projects; (2) *national and international policymakers* whose decisions can provide significant incentives or disincentives for the development of specific support alternatives; (3) *major donors* who have or can help access the funds necessary to implement promising and proven support alternatives at a scale necessary to meet the need; (4) *monitoring and evaluation organizations* that provide objective empirical knowledge about the nature and magnitude of the OVC challenge, and evaluations of alternative support options; and (5) the *communities* themselves, which must ultimately take ownership for the design and effective implementation of alternatives.

Implications of the Idweli Approach

1. NGOs/Implementers

- Sensitivity and engagement. NGOs, whether nationally based or internationally, must be culturally sensitive to the needs of the communities they hope to work with. Part of developing such sensitivity requires broad local stakeholder involvement which extends from the needs assessment and vision stages to implementation, operation and evaluation.
- Accountability and transparency. NGOs working with communities must be sure that what they do at every stage is transparent and accountable to the community and especially to its OVC. An essential element in achieving accountability and transparency is being very clear about vision and goals. Regardless of how they are developed, in the end the community must see these as their own. The community and the NGO should hold each other mutually accountable for achieving the vision and goals.
- Capacity building. Meeting the OVC challenge will require a significant expansion of NGO capacity. Small NGOs may require assistance in developing organizational skills, including board development, conflict resolution, collaboration, facilitation and fundraising skills.
- Exit strategy. NGOs should integrate a clear exit strategy into the development of projects so that their community partners are clear about their own responsibilities for sustainability.
- Evaluation. Collaborators should integrate ongoing impact evaluation, including a process for gathering feedback from key stakeholders, throughout the course of a project.

2. Policymakers

- Encouraging local involvement. National policymakers can do a lot to ensure that international donors and NGOs work collaboratively with local communities. This should be made a condition for working in a country, and one that is carefully monitored.
- Capacity building. National policymakers can encourage the development of more effective NGOs by supporting training, ongoing technical assistance and networking opportunities.
- Removing barriers and increasing incentives. The ways policies are framed can unintentionally stifle innovation; for example, declaring that certain types of solutions are unacceptable (e.g., institutional placements) can result in precluding development of innovative hybrids which may prove quite effective, such as the Godfrey's Children Center. Conversely, more effective policies can serve as a stimulus for development by supporting community-based projects. An example would be Tanzania's national policy of supplying more teachers whenever a community builds additional classrooms; this program has provided an opportunity for Africa Bridge to leverage its investment in classroom construction in the Isongole Ward.

3. Donors

- Support initiatives not "solutions." There is great danger in donors assuming that they have the answer and that their principal challenge is to get communities to sign on. Donors should fund defined initiatives that allow broad latitude for local communities to interpret and respond based on their own needs and capacities.
- Let a thousand flowers bloom. Part of the logic of supporting initiatives rather than prescribed solutions should be to encourage development of local hybrid alternatives. Encouraging such development and innovation should be accompanied by a commitment to learn from the results and especially to support communities and NGOs learning from each other.
- Capacity building. As part of an approach to supporting innovative and flexible hybrid responses to the needs of OVC, funders should commit to building the capacity of NGOs and communities. Increasing capacity within and between NGOs is essential to providing a pathway for getting funds

from the national level down to communities, families and individuals.

- Ongoing technical assistance. The commitment of donors to NGOs and to community-based projects should extend beyond the initiation and early operating phases. It is essential that projects receive ongoing technical support, including support to develop and implement sustainability plans.

4. Monitoring and Evaluation Organizations

- Involving stakeholders. The same kind of cultural sensitivity and stakeholder engagement recommended for NGOs also applies to organizations engaged in monitoring and evaluation work at the community and family levels. If the objective of such organizations is to understand "impacts" and "well-being" then these must be defined, at least in part, from the perspectives of and with input from those being impacted.
- Employing standardized measures. There has been debate in Africa about whether standardized measures of psychosocial well-being of children are available to determine needs and evaluate the impacts of responses. The answer is yes; such measures are already being used effectively in other countries. However, applying them to Africa, especially in rural areas, requires adaptation to specific cultures, careful training and monitoring of field workers.
- Multiple methods and investigators. In addition to employing standardized measures, it is extremely useful to incorporate multiple measures — both quantitative and qualitative — in studies, thereby providing a more robust foundation for interpreting findings. Likewise, there is great benefit in employing a team of investigators that can provide a cross-cultural/multicultural perspective both on project design and the analysis of results.
- Longitudinal research. There is very little longitudinal research on the effects of orphanhood on the long-term well-being of children in sub-Saharan Africa. It is especially important to have such research on children whose needs are being met through different interventions in order to assess impacts and not just program outcomes.

5. Communities

- Building ownership. Communities must be fully and actively engaged in all stages of project development, implementation and ongoing operation. Without such involvement, social sustainability and integration are unlikely. Community engagement must include all key stakeholders, especially women and children who are too often ignored in such processes.
- Sustainability and governance. Integral to the process of building ownership is thinking about sustainability early and often throughout project development. One of the things that will help cultivate sustainability planning is building active local governance into projects at the outset. This should be coupled with effective and ongoing technical assistance.
- Transparency and accountability. Too often when external funds are brought into a community, issues of accountability and transparency emerge that undermine effectiveness. Part of establishing effective governance should be to address these concerns, especially in ways that hold communities and NGOs mutually accountable for their work with each other and for the children they are serving.
- Culture of volunteerism. The practice of volunteering services for and with NGOs is not clear in the African context. This is especially the case for people living under subsistence conditions. Communities and NGOs need to consciously cultivate a culture of volunteerism.

Appendix 1. List of Survey Instruments

Survey A	Consent Form
Survey B	Demographic Survey
Survey C	Housing and Budget Survey
Survey D	Physical Health Survey
Survey E	Support and Sustainability Survey — Key Informant Interviews
Survey F	School Performance Survey
Survey 1	Children's Depression Inventory (CDI)
Survey 2	Social Support Questionnaire (SSQ)
Survey 3	Strengths and Difficulties Questionnaire (SDQ)
Survey 4	Children's Sense of Well-Being — Center Orphans
Survey 5	Children's Sense of Well-Being — Village Orphans
Survey 6	Children's Sense of Well-Being — Village Non-Orphans
Survey 7	Caring for Children — Caregivers of Center Orphans
Survey 9*	Caring for Children — Caregivers of Village Orphans
Survey 10	Caring for Children — Caregivers of Village Non-Orphans
Survey 11	Children's Center Development Process — Children
Survey 12	Children's Center Development Process — Adults
Survey 13	Microfinance Loans — Interviews with Households

* NOTE: Survey #8 — Focus Group for Caregivers of Orphans Attending Preschool at the Children's Center: This instrument was not used as the number of respondents was insignificant.

Appendix 2. Demographic Frequencies

Variable	Center Orphans (n=51) %	Village Orphans (n=40) %	Village Non-Orphans (n=99) %	Microfinance Loan Children (n=19) %
Male	41.2	47.5	47.4	52.6
Female	56.9	52.5	52.6	36.8
Attend school	90.2	75.0	83.5	84.2
Mother living	17.6	12.5	100.0	73.7
Time since mother's death				
<6 months	2.0	2.5	n/a	0.0
6-12 months	2.0	2.5	n/a	0.0
1-3 years	11.8	10.0	n/a	33.3
>3 years	31.4	37.5	n/a	0.0
Don't know	35.3	25.0	n/a	66.7
Father living	5.9	5.0	100.0	63.2
Time since father's death				
<6 months	2.0	5.0	n/a	0.0
6-12 months	0.0	2.5	n/a	0.0
1-3 years	7.8	10.0	n/a	5.3
>3 years	33.3	30.0	n/a	10.5
Don't know	39.2	32.5	n/a	10.5
Caregiver gender				
Male	88.2	10.0	8.2	5.3
Female	11.8	90.0	41.2	36.8

Appendix 3. Housing and Budget Frequencies

Variable	Center Orphans (n=51) %	Village Orphans (n=40) %	Village Non-Orphans (n=99) %	Microfinance Loan Children (n=19) %
Has electricity	n/a	12.5	2.1	31.6
Has radio	n/a	52.5	62.9	78.9
Has TV	n/a	0.0	2.1	15.8
Has phone	n/a	2.5	5.2	15.8
Has refrigerator	n/a	0.0	1.0	5.3
Has motorcycle	n/a	0.0	1.0	0.0
Has bike	n/a	20.5	21.6	42.1
Has car	n/a	0.0	1.0	10.5
House has shops	n/a	10.0	8.2	33.3
House has farm	n/a	87.5	97.9	89.5
Can afford 3 meals/day	n/a	80.0	89.5	94.4
Can afford school	n/a	80.0	81.1	94.7
Can afford clothes	n/a	79.5	93.7	94.7
Roof				
Thatch	n/a	20.0	23.7	0.0
Iron	n/a	77.5	75.3	94.7
Floor				
Mud	n/a	52.5	56.7	15.8
Tile	n/a	45.0	43.3	78.9
Walls				
Bricks	n/a	97.5	97.9	84.2
Cement	n/a	0.0	2.1	10.5
Toilet				
Flush	n/a	0.0	1.0	0.0
Pit	n/a	95.0	95.9	94.7
VIP	n/a	2.5	1.0	0.0
Share	n/a	10.0	8.4	5.3
Water				
Piped	n/a	5.0	3.1	5.6
Public tap	n/a	92.5	95.9	94.4
Public well	n/a	0.0	1.0	0.0

Appendix 4. School Performance — ANOVA to Compare Group Means

		Sum of Squares	df	Mean Square	F	Sig.
Level in school	Between groups	4.435	3	1.478	.314	.815
	Within groups	904.382	192	4.710		
	Total	908.816	195			
Days missed 1/1/05-6/30/05	Between groups	537.589	3	179.196	2.730	.047
	Within groups	7220.350	110	65.640		
	Total	7757.939	113			
Days missed 7/1/05-11/30/05	Between groups	123.709	3	41.236	1.385	.251
	Within groups	3363.214	113	29.763		
	Total	3486.923	116			
June 2005 terminal test	Between groups	1323.718	3	441.239	1.165	.326
	Within groups	47350.762	125	378.806		
	Total	48674.481	128			
Nov 2005 terminal test	Between groups	553.272	3	184.424	.632	.596
	Within groups	36490.542	125	291.924		
	Total	37043.814	128			
Test change	Between groups	711.163	3	237.054	2.150	.097
	Within groups	13784.759	125	110.278		
	Total	14495.922	128			

Appendix 5. Chi-Square Results from Children's Interviews

Current Living Situation: Like School

Crosstab

Like School (1=presence of code, 0=absence of code)		GROUP			Total
		Center Orphan	Village Orphan	Village Non-Orphan	
0	Count	22	32	88	142
	Expected count	35.3	30.6	76.1	142.0
	% within group	48.9%	82.1%	90.7%	78.5%
1	Count	23	7	9	39
	Expected count	9.7	8.4	20.9	39.0
	% within group	51.1%	17.9%	9.3%	21.5%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	32.203(a)	2	.000
Likelihood ratio	29.642	2	.000
Linear-by-linear association	29.413	1	.000
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.40.

Current Living Situation: Like Chores/Work

Crosstab

LikeChores/Work (1=presence of code, 0=absence of code)		GROUP			Total
		Center Orphan	Village Orphan	Village Non-Orphan	
0	Count	43	30	88	161
	Expected count	40.0	34.7	86.3	161.0
	% within group	95.6%	76.9%	90.7%	89.0%
1	Count	2	9	9	20
	Expected count	5.0	4.3	10.7	20.0
	% within group	4.4%	23.1%	9.3%	11.0%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	8.047(a)	2	.018
Likelihood ratio	7.382	2	.025
Linear-by-linear association	.125	1	.723
N of valid cases	181		

(a) 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.31.

Current Living Situation: All Likes (except Like Nothing)

Crosstab

Like Everything (1=presence of code, 0=absence of code)		GROUP			Total
		Center Orphan	Village Orphan	Village Non-Orphan	
0	Count	9	18	45	72
	Expected count	17.9	15.5	38.6	72.0
	% within group	20.0%	46.2%	46.4%	39.8%
1	Count	36	21	52	109
	Expected count	27.1	23.5	58.4	109.0
	% within group	80.0%	53.8%	53.6%	60.2%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	9.781(a)	2	.008
Likelihood ratio	10.467	2	.005
Linear-by-linear association	7.663	1	.006
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.51.

Desired Change-Current—Physical Needs

Crosstab

Change: Physical Needs (1=presence of code, 0=absence of code)		GROUP: Center Orphan	Village Orphan	Village Non-Orphan	Total
0	Count	39	27	60	126
	Expected count	31.3	27.1	67.5	126.0
	% within group	86.7%	69.2%	61.9%	69.6%
1	Count	6	12	37	55
	Expected count	13.7	11.9	29.5	55.0
	% within group	13.3%	30.8%	38.1%	30.4%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	8.949(a)	2	.011
Likelihood ratio	9.856	2	.007
Linear-by-linear association	8.547	1	.003
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.85.

Differences Between You and Children at Center: All "Self has It"

Crosstab

Differences- Self has Everything (1=presence of code, 0=absence of code)		GROUP: Village Orphan	GROUP: Village Non-Orphan	Total
0	Count	38	80	118
	Expected count	33.8	84.2	118.0
	% within group	97.4%	82.5%	86.8%
1	Count	1	17	18
	Expected count	5.2	12.8	18.0
	% within group	2.6%	17.5%	13.2%
Total	Count	39	97	136
	Expected count	39.0	97.0	136.0
	% within group	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp.Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson chi-square	5.422(b)	1	.020		
Continuity correction(a)	4.198	1	.040		
Likelihood ratio	6.965	1	.008		
Fisher's exact test				.023	.013
Linear-by-linear association	5.382	1	.020		
N of valid cases	136				

(a) Computed only for a 2x2 table.
(b) 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.16.

Future Vision-Knowledge/Education/Study

Crosstab

Knowledge/Ed/Study (1=presence of code, 0=absence of code)		GROUP			Total
		Center	Village Orphan	Village Non-Orphan	
0	Count	18	20	79	117
	Expected count	29.1	25.2	62.7	117.0
	% within group	40.0%	51.3%	81.4%	64.6%
1	Count	27	19	18	64
	Expected count	15.9	13.8	34.3	64.0
	% within group	60.0%	48.7%	18.6%	35.4%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	26.980(a)	2	.000
Likelihood ratio	27.492	2	.000
Linear-by-linear association	25.684	1	.000
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.79.

Future Vision-Have a House, Money/Material Possessions, QOL

Crosstab

Have House, Money, Material Possessions/QOL (1=presence of code, 0=absence of code)		GROUP			
		Center	Village Orphan	Village Non-Orphan	Total
0	Count	24	27	78	129
	Expected count	32.1	27.8	69.1	129.0
	% within group	53.3%	69.2%	80.4%	71.3%
1	Count	21	12	19	52
	Expected count	12.9	11.2	27.9	52.0
	% within group	46.7%	30.8%	19.6%	28.7%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	11.109(a)	2	.004
Likelihood ratio	10.808	2	.004
Linear-by-linear association	10.968	1	.001
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.20.

Child Says S/He can Achieve Future Vision Through Study

Crosstab

Self-Efficacy Study (1=presence of code, 0=absence of code)		GROUP			Total
		Center	Village Orphan	Village Non-Orphan	
0	Count	18	19	62	99
	Expected count	24.6	21.3	53.1	99.0
	% within group	40.0%	48.7%	63.9%	54.7%
1	Count	27	20	35	82
	Expected count	20.4	17.7	43.9	82.0
	% within group	60.0%	51.3%	36.1%	45.3%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	7.813(a)	2	.020
Likelihood ratio	7.854	2	.020
Linear-by-linear association	7.645	1	.006
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.67.

Self-Efficacy-Money, Work/Career

Crosstab

Self-Efficacy—Money,Work/Career (1=presence of code, 0=absence of code)		GROUP			Total
		Center	Village Orphan	Village Non-Orphan	
0	Count	36	26	86	148
	Expected count	36.8	31.9	79.3	148.0
	% within group	80.0%	66.7%	88.7%	81.8%
1	Count	9	13	11	33
	Expected count	8.2	7.1	17.7	33.0
	% within group	20.0%	33.3%	11.3%	18.2%
Total	Count	45	39	97	181
	Expected count	45.0	39.0	97.0	181.0
	% within group	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson chi-square	9.151(a)	2	.010
Likelihood ratio	8.635	2	.013
Linear-by-linear association	2.938	1	.087
N of valid cases	181		

(a) 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.11.

Current Feeling-Happy/Good/Change Since Coming to the Center, or My New Home has been Good

Crosstab

CurrentFeeling-Happy/ Good/Good Change (1=presence of code, 0=absence of code)		GROUP		Total
		Village Orphan	Village Non-Orphan	
0	Count	12	25	37
	Expected count	19.8	17.2	37.0
	% within group	26.7%	64.1%	44.0%
1	Count	33	14	47
	Expected count	25.2	21.8	47.0
	% within group	73.3%	35.9%	56.0%
Total	Count	45	39	84
	Expected count	45.0	39.0	84.0
	% within group	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp.Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson chi-square	11.880(b)	1	.001		
Continuity correction(a)	10.410	1	.001		
Likelihood ratio	12.143	1	.000		
Fisher's exact test				.001	.001
Linear-by-linear association	11.739	1	.001		
N of valid cases	84				

(a) Computed only for a 2x2 table.
(b) 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.18.

Current Feeling-Not Good/Change Since Coming to the Center, or My New Home has been Bad

Crosstab

Current Feeling-Not Good/Bad Change (1=presence of code, 0=absence of code)		GROUP: Village Orphan	GROUP: Village Non-Orphan	Total
0	Count	45	34	79
	Expected count	42.3	36.7	79.0
	% within group	100.00%	87.2%	94.0%
1	Count	0	5	5
	Expected count	2.7	2.3	5.0
	% within group	.0%	12.8%	6.0%
Total	Count	45	39	84
	Expected count	45.0	39.0	84.0
	% within group	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp.Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson chi-square	6.134(b)	1	.013		
Continuity correction(a)	4.058	1	.044		
Likelihood ratio	8.039	1	.005		
Fisher's exact test				.019	.019
Linear-by-linear association	6.061	1	.014		
N of valid cases	84				

(a) Computed only for a 2x2 table.
(b) 2 cells (50%) have expected count less than 5. The minimum expected count is 2.32.

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Executive Summary

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End Notes

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Part 2. Godfrey's Children Center in Idweli, Tanzania

[68] This section is based on ethnographic field work conducted in connection with the evaluation by David Ipyana Mwaipopo, M.A., in Population Studies (Tanzania).
[69] SWISSAID has developed a program to shore up the failing Upatu system. See www.swissaid.ch/projekte/e/Tansanis.htm.
[70] In Idweli, the village chairman is also the chief.
[71] Every ten houses in the village equals a cell. Each ten cell has a leader who is responsible for representing the cell in village affairs.
[72] Based on a focus group with female elders in Idweli, conducted on September 13, 2005.
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[80] See www.africabridge.org/projects.html.
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Part 3. Evaluation of the Children's Center

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[89] The estimate of 70 cents USD per day is based on self reports by villagers at the Future Search conference held in Idweli (November 2002). This amount reflects income from earnings consisting of any wages, plus earnings from the sale of crops or other goods. It does not reflect the value of crops produced and then consumed by a household.
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Part 4. Implications of the Idweli Approach

[96] A natural experiment is a naturally occurring instance of obserable phenomena which approaches or duplicates a scientific experiment.
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[98] Ibid., 19.
[99] Ibid., 20.
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[102] Ibid., 64.
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[107] In a strict cost-benefit analysis, only public benefits should be counted against public costs, hence increased personal earnings should not be part of the calculation, while increased taxes on earnings and purchases would be included. A broader analysis might also include increases to gross domestic product resulting from a larger and healthier workforce.
[108] Future benefits would have to be calculated by using net present value theory. Although capital and process costs (e.g., expenses associated with facilitating community meetings, transaction costs involved in establishing and maintaining relations among participating NGOs) have not been discussed here, these costs should be amortized over the expected useful life of the intervention and then added into estimated daily expenditures per child.
[109] An important issue in calculating a multiplier consists of deciding if benefits should be counted only if they are directly or indirectly realized by those bearing the costs. For example, if the central government is bearing the costs, then its measured benefits would consist of taxes received from future earnings along with avoided payments associated with socially disruptive behaviors.
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Victor Dukay, MBA, Ph.D.
PO Box 40937
Denver, Colorado, USA 80204
Phone: 303-825-0888 x3
Fax: 303-595-8925
E-mail: vic@lundyfoundation.org
www.lundyfoundation.org