

## Youth in the Ghana Experiment: Characteristics and Living Conditions

by Gina A.N. Chowa, Rainier Masa, & Isaac Osei-Akoto

July 2012 ○ YouthSave Research Brief No. 12-35

### Background

If provided an opportunity to save via formal financial services, will youth participate? This is one of the fundamental questions being asked by YouthSave, a four-country study targeted for young people ages 12 to 18 living predominantly in low-income households. Youth do save informally and, given an opportunity, may also participate in formal banking services (UNCDF, 2011). However, such opportunities are minimal. On the other hand, the limited research available suggests that financial inclusion has important youth development effects and deserves greater study (Chowa & Ansong, 2010; Deshpande & Zimmerman, 2010; Elliott, 2012; Scanlon & Adams, 2009; Ssewamala & Ismayilova, 2009). YouthSave is a pioneering project designed to increase savings and development among low-income youth in Colombia, Ghana, Kenya, and Nepal. The goals of YouthSave research are to measure the uptake, savings outcomes, experiences, and impacts of Youth Savings Accounts (YSAs) on clients and financial institutions.

In Ghana, a rigorous research design that includes a control group, with quantitative and qualitative evidence, has been implemented to assess the impact of savings accounts on youth development and asset accumulation.

This brief focuses on the individual, social, and economic characteristics of youth and their families in the Ghana Experiment. Understanding these characteristics will help us examine how they influence the uptake of savings accounts and savings outcomes. Little is known about how youth and family characteristics influence saving behaviors of youth in Sub-Saharan Africa. Research in YouthSave is anticipated to fill some of these gaps.

### Methods

The Ghana Experiment uses a cluster randomized design, with 100 schools randomly selected from eight

of Ghana's ten regions. Fifty-schools were randomly assigned to the treatment condition and another 50 schools were randomly assigned to the control condition. Sixty students were randomly selected from each school for a total of 3,000 youths in the treatment and 3,000 in the control condition with oversampling to take attrition into account. This process yielded a sample of 6,252 youth.

Data from this brief are from baseline surveys with 6,252 youth and 4,576 parents and guardians of these youth. The youth are from three grade levels, Primary 6 (equivalent to grade 6 in the US), Junior High School 1 (equivalent to grade 7 in the US), and Junior High School 2 (equivalent to grade 8 in the US). Nearly equal numbers of girls (51%) and boys (49%) were interviewed. Youth were also fairly evenly divided by grade level, including Primary 6 (36%), JHS1 (32%), and JHS2 (32%). The average age of youth is 15 years. Seventy-three percent of youth surveyed at baseline have a parent or guardian who was also surveyed at baseline.

The youth survey included questions about demographics, education, health, financial capability, asset ownership, living conditions, and future aspirations and expectations. The parent or guardian questionnaire included questions on household information, education, outlook and expectations, health, and financial well-being.

Data were collected from May through June 2011 by our partners at the Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana.

### Who are the Youth in YouthSave Ghana?

This section describes the individual or demographic characteristics of youth. These characteristics include age, gender, grade-level, and region of residence and may influence how and when the person has access



to resources and opportunities. For instance, young people living in rural areas may have limited access to formal financial products and services, compared to their peers living in urban areas. Prior research has also identified these characteristics as predictors of a wide range of youth outcomes, including education and health (Duraismy, 2002; McCarthy et al., 2000).

### Age and Gender

A little over half of the youth (51%) are girls. There is variation by age, with 57% of the youth between the ages of 14 and 16, 25% age 17 and above, and 18% age 13 or below (Figures 1 and 2). The mean age of the youth sample is 15 as is the average age of the girls in the sample, while the average age of boys in the sample is 16. Youth's age ranges from 9 to 26. Youth ages 15 and below are more than 50% girls, whereas, youth ages 16 and above are more than 50% boys.

Figure 1. Ghana YouthSave Participants by Gender

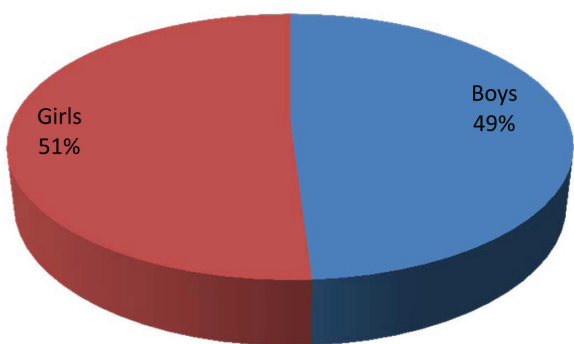
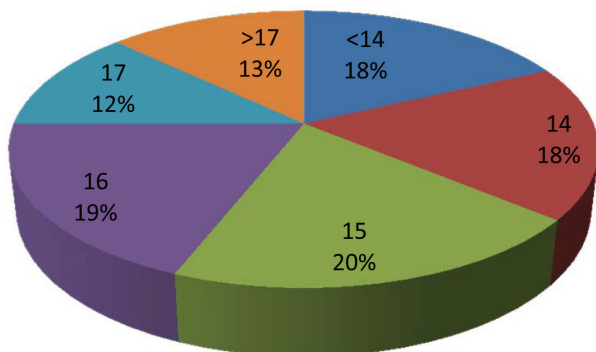


Figure 2. Ghana YouthSave Participants by Age

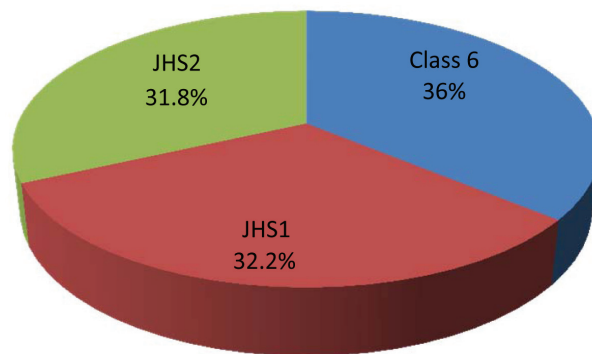


### Grade Level

Because the baseline Ghana experiment data only include primary class 6, and Junior High School (JHS) classes 1 and 2, we only report on these three grade levels.

At baseline, youth are fairly evenly distributed across grade level 6 (36%), JHS1 (32.2%), and JHS2 (31.8%) (Figure 3). Although the grade level 6 class is equally divided by gender, grades JHS1 and JHS2 have slightly more girls than boys (52% and 51%, respectively).

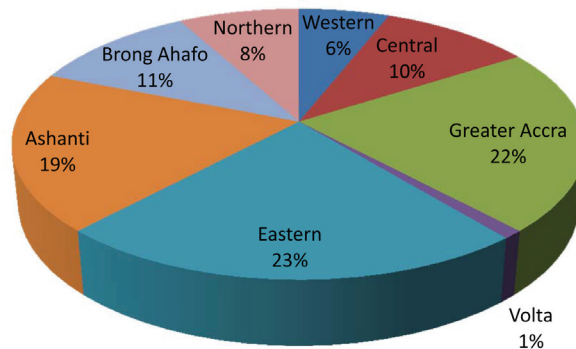
Figure 3. Ghana YouthSave Participants by Grade Level



### Region of Residence

The Ghana YouthSave Experiment randomly selected youth from eight of the country's ten regions: Ashanti, Brong Ahafo, Central, Eastern, Greater Accra, Northern, Volta, and Western regions. More than 60% of the youth are from three of these regions: the Greater Accra, Eastern, and Ashanti regions. Among these three, the most youth come from the Eastern region (23%), followed by the Greater Accra (22%) and Ashanti (19%) regions (Figure 4). The smallest number of youth comes from the Volta (<1%) and Western (6%) regions. Slightly more youth live in urban areas (51%) than rural areas (49%).

Figure 4. Ghana YouthSave Participants by Region of Residence



Although 51% of the overall sample is girls, there are more boys than girls in four regions: Central, Volta, Brong Ahafo, and Northern. The average age of youth varies by region. Among youth from the Western, Central, Eastern, Ashanti, and Brong Ahafo regions, the average age is 15, while among youth from Greater Accra and Northern regions, it is 16, and among youth from the Volta region, it is 17.

## Youth and Family Living Conditions

Living conditions are an indicator of socioeconomic status and have substantial implications for well-being of youth. Living conditions indicate how many resources are at the youth's disposal for their development (Sclar & Northridge, 2003). A lack of electricity, for example, might mean that youth cannot work on their homework after dark, or that they have to use unsafe and unhealthy lighting alternatives. Needing to fetch drinking water from outside the home reduces the time available for youth to do homework. In addition, the quality of living conditions may indicate access (or lack of access) to services and facilities such as education, health, and financial, as well as characteristics of the neighborhoods in which youth live (Shaw, 2004). This has implications for the quality and quantity of resources, both tangible and non-tangible, that are important for the youth's development.

In addition to living conditions, number of household dependents and household income affect youth development. Several theories have proposed that larger sibship size or the number of children in the household have negative effects on youth development (Blake, 1981; Zajonc & Markus, 1975). Research, for instance, has shown the number of children in the household influences development outcomes such as education (Downey, 1995; Lu, 2009). Youth in households with more dependents may have fewer resources for engaging in activities that are important to youth development. Similarly, at the basic level, income provides the means for families to buy food, send their children to school, and pay for health care costs. An extensive literature exists that has studied the effects of being income-poor on various domains of youth development (see, for example, Aber et al., 1997; Brooks-Gunn & Duncan, 1997; Duncan, Yeung, Brooks-Gunn, & Smith, 1998).

Living conditions, number of dependents, and household income have been shown to influence youth's development trajectory. The following section reports on these factors.

### Dwelling

The most common type of dwelling reported by youth is rooms in compound houses (59%).<sup>1</sup> Other types of dwelling include bungalows or separate houses (16%), other types of rooms (10%), and semi-detached houses (6%) (Figure 5). The majority of surveyed youth live in houses that are permanent structures (94%) versus temporary.

### Drinking Water

The most common type of drinking water source reported by youth is piped water from the public tap (43%). Other common sources of drinking water include piped water piped into a dwelling (12%), water from a covered well

(11%), and piped water piped into a yard (10%) (Figure 6).

Figure 5. Ghana YouthSave Households by Type of Dwelling

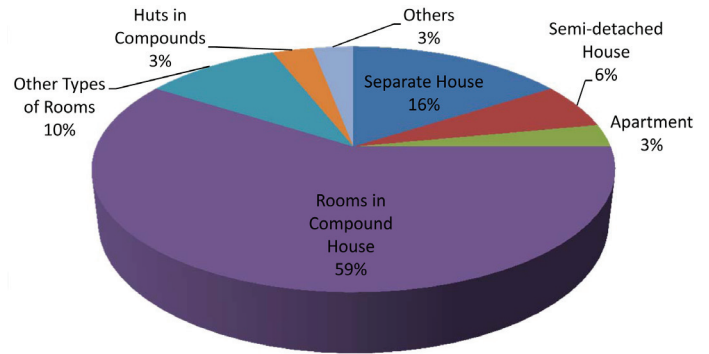
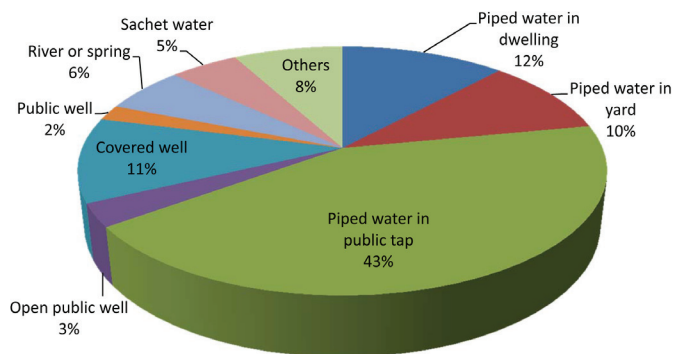


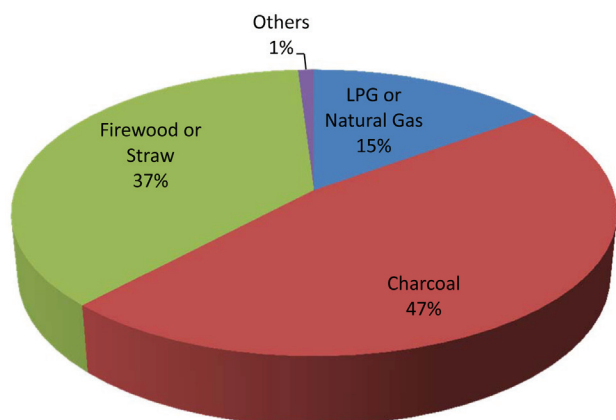
Figure 6. Ghana YouthSave Households by Type of Drinking Water Source



### Energy for Cooking

The main source of energy for cooking is charcoal for nearly half of youth (47%) and firewood or straw (37%) or LPG or natural gas (15%) for a smaller number (Figure 7). Electricity and kerosene are among the least commonly used (1%).

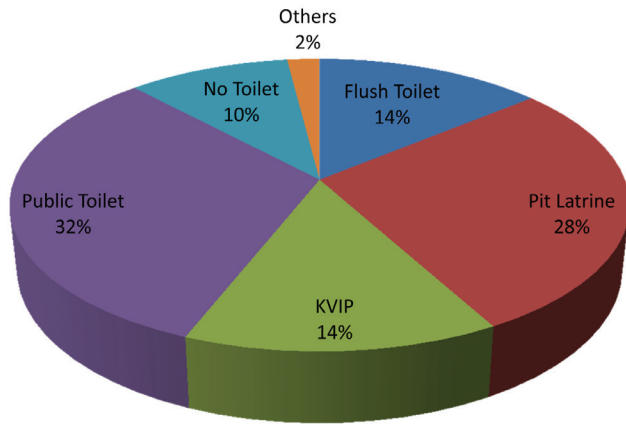
Figure 7. Ghana YouthSave Households by Type of Energy Source for Cooking



## Toilet Facility

Common types of toilet facilities used by youth include public toilets, pit latrines, private Kumasi Ventilated-Improved Pit toilets (KVIPs), and private flush toilets. Thirty-two percent of youth are from households that use public toilet facilities. Twenty-eight percent of youth are from households that use pit latrines, and 10% have no toilet facility (Figure 8).

Figure 8. Ghana YouthSave Households by Type of Toilet Facility



## House Materials

Nearly 8 in 10 youth (77%) live in houses whose outer walls are made of cement or sandcrete blocks (Figure 9).<sup>2</sup> Other materials used for outer walls include mud and mud bricks, landcrete, and wood.

Nine in 10 youth live in houses that have cement or concrete floors (Figure 10). Other floor materials reported include mud and marble or ceramic tiles.

Nearly 9 in 10 youth (85%) live in houses that have roofs of corrugated iron sheets (Figure 11). Other roofing materials include palm leaves or thatch, asbestos, and cement or concrete.

Figure 9. Ghana YouthSave Households by Materials Used for House Outer Wall

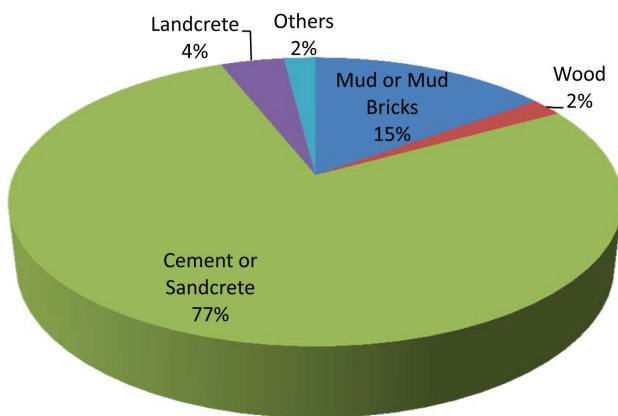


Figure 10. Ghana YouthSave Households by Materials Used for Floor of House

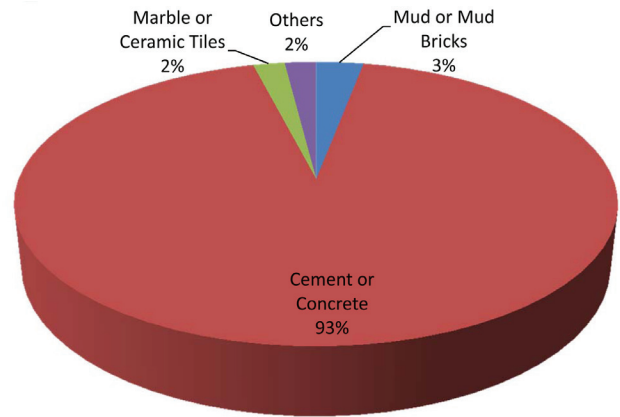
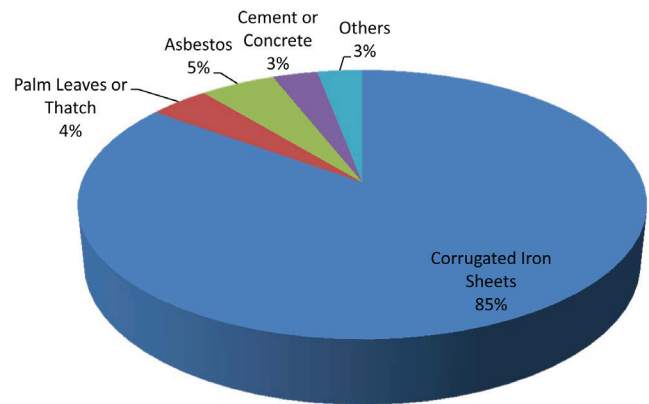


Figure 11. Ghana YouthSave Households by Materials Used for Roof of House



## Economic Dependents<sup>3</sup>

The number of economic dependents of all ages varies by families. The average number of dependents per family is five. Eight in 10 parents or guardians (81%) have at least one dependent between 15 and 35 years old. Seven in 10 (73%) have at least one dependent age 11 or younger. Seven in 10 parents or guardians (70%) also have one dependent between 12 and 14 years old. Among families that have at least one dependent age 11 or younger, the average number of dependents within this age range is two. Similarly, the average number of dependents among households that have at least one dependent between 15 and 35 is two. The average number of dependents among families that have at least one dependent between 12 and 14 years old is one.

## Household Monthly Income

The mean monthly income of YouthSave Ghana households is 204 GHS (135 USD).<sup>4</sup> The median monthly income is 120 GHS (79 USD).



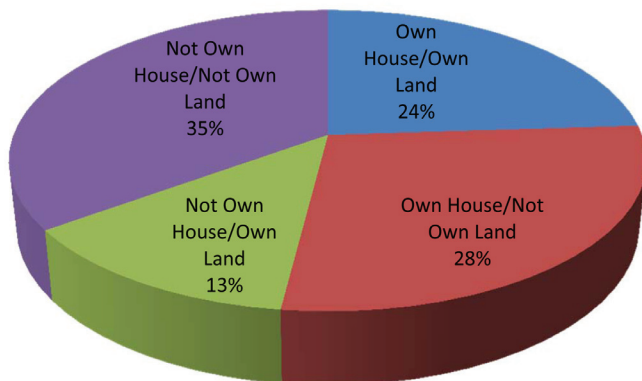
## Youth and Family Asset-Ownership

Assets are a key pathway to youth well-being. Asset accumulation, especially savings, can contribute to the needed resources for a youth's education and nutrition, among other things. Households with assets are able to pay for their children's education, food, and clothing. Families with assets are also better able to smooth consumption in times of income shocks such as funerals and natural disasters, thus reducing families' vulnerability to long-term adverse consequences. Empirical research has also shown that family asset ownership is associated with youth educational, economic, health, and social outcomes (Chowa, Ansong, & Masa, 2010; Kim & Sherraden, 2011; Williams Shanks, Kim, Loke, & Destin, 2010).

### Real Property

Nearly four in ten youth (37%) are from families that own land. Five in ten (52%) come from families that own a house. Only two in ten youth, however, are from families that own both a house and land. Three in ten youth (35%) come from families who own neither a house nor land (Figure 12).

Figure 12. Ghana YouthSave Households by Type of Real Property Owned



### Transportation-Related Assets

Five in 10 youth (52%) are from families that own at least one type of transportation-related asset. Among these households, bicycles are owned by the households of four in ten youth, and motorcycles and other vehicles (for example, cars and trucks) are each owned by the households of one in ten youth (Figure 13).

### Livestock

Six in 10 youth (62%) come from families that own at least one type of livestock. Among these households, over half of youth (55%) are from families that own chickens, and nearly one-third (29%) are from families that own goats. The average number of chickens owned by families is 12, and the average number of goats is 6. Other common livestock include sheep, cattle, and pigs

(Figure 14).

Ownership of livestock varies by region, with families from the more urban areas of Ashanti and Greater Accra being less likely to own livestock than families from other regions.

Figure 13. Ghana YouthSave Households by Type of Transportation-Related Assets Owned

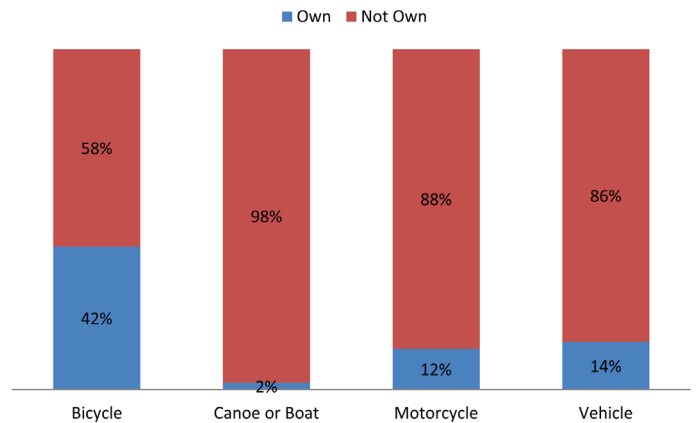
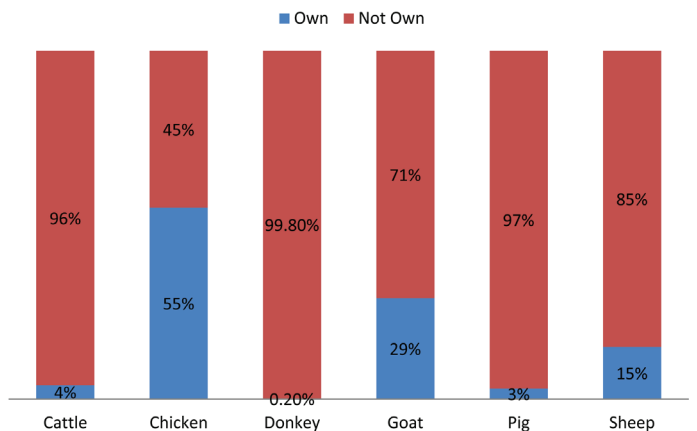


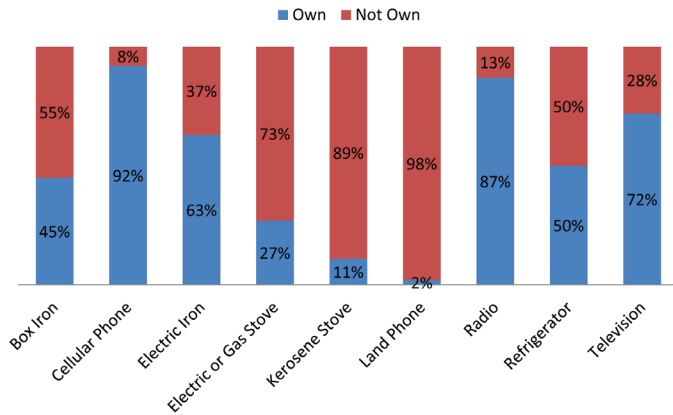
Figure 14. Ghana YouthSave Households by Type of Livestock Owned



### Household Possessions

Almost all YouthSave Ghana families (98%) own at least one type of household possession. Among these households, nine in ten youth (92%) are from families that own cellular phones, with an average of three cellular phones per family. Other commonly held household possessions include radios (87%), televisions (72%), electric irons (63%), and refrigerators (50%) (Figure 15). YouthSave households also report box irons, electric or gas stoves, and kerosene stoves as common possessions.

**Figure 15. Ghana YouthSave Households by Type of Household Possessions Owned**



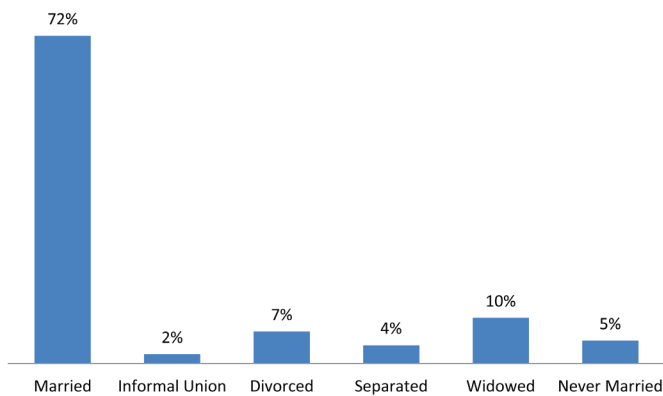
## Who are the Parents of Youth?

A youth's family is important to their health and educational and social development. For instance, parent's or guardian's years of education are strongly associated with positive academic achievement and attainment of their children (Davis-Kean, 2005). Parent education also has an effect on youth's health. For instance, fewer years of parent education are associated with poorer health outcomes in children (Chen, Martin, & Matthews, 2006).

### Age and Gender

The average age of parents or guardians who participated in the baseline survey is 46. The majority are female (70%) and married (72%) (Figure 16).

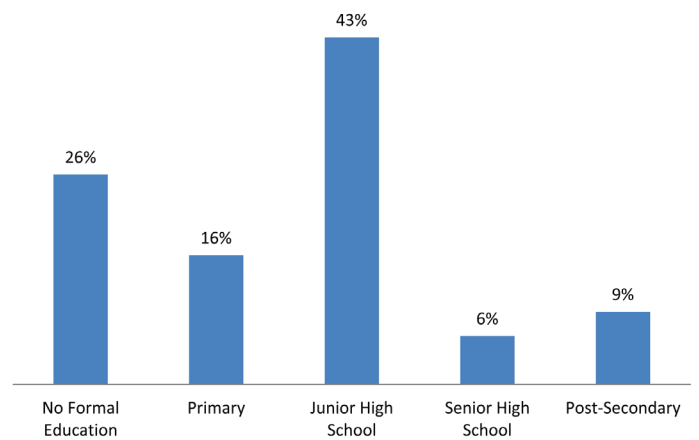
**Figure 16. Ghana YouthSave Households by Marital Status of Parents/Guardians**



### Education Level

Nearly three in ten parents or guardians have no formal education (Figure 17). Less than one in ten have a post-secondary education.

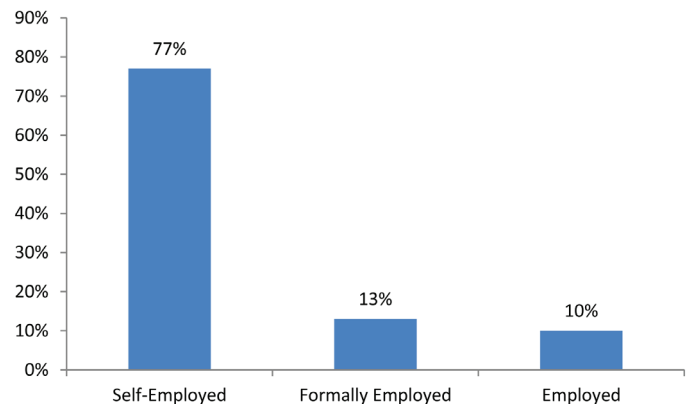
**Figure 17. Ghana YouthSave Households by Education Level of Parents/Guardians**



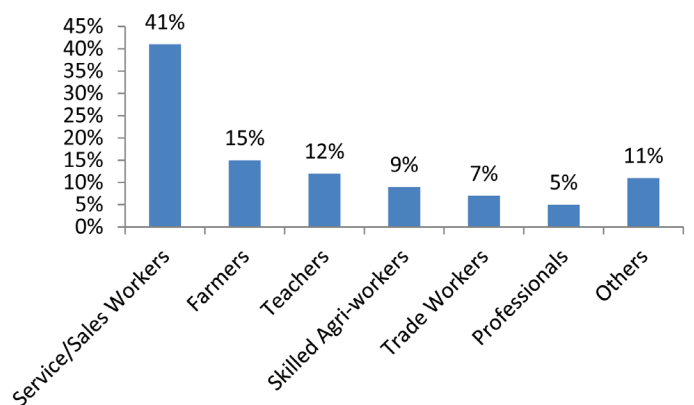
### Type of Work

Among those who are self-employed or employed in the formal sector, four in ten (41%) are service and sales workers, nearly two in ten (15%) are farmers, and one in ten (12%) are teachers (Figures 18 and 19).

**Figure 18. Ghana YouthSave Households by Employment Status of Parents/Guardians**



**Figure 19. Ghana YouthSave Households by Occupation of Parents/Guardians**



## Conclusion

Are participants in the YouthSave Ghana Experiment like the general Ghanaian population? The answer matters because YouthSave aims at improving financial inclusion and well-being of low-income youth. Based on the data, we know that socioeconomic characteristics of youth and their households in YouthSave Ghana differ from those of the general Ghanaian population. Differences include:

- The average monthly income of YouthSave Ghana households is approximately 135 USD, which is lower than Ghana's estimated 2011 GDP per capita, purchasing power parity of 258 USD per month (CIA, n.d.).
- Although the Ghana Experiment sample has a lower percentage of parents or guardians (26%) with no formal education than the general population (31%), only 9% of parents or guardians in the YouthSave Ghana sample have postsecondary education or higher, compared with 14% in the general population (Ghana Statistical Service, 2008). Lower rates of postsecondary education completion are consistent with a low-income population.
- Sixty-two percent of YouthSave Ghana households own or keep livestock, compared with 60% in the general population (Ghana Statistical Service, 2008), indicating that Ghana Experiment households may be more likely to stock their wealth as livestock compared to the general population. Consistent with other findings above, this suggests that YouthSave Ghana households are mostly low-income.
- A higher percentage of parents or guardians (41%) interviewed at baseline are service and sales workers (for example shop and market workers), compared with only 13% of the general population (Ghanaian Statistical Service, 2008). Many of these service and sales workers are employed in the informal sector. Higher rates of engagement in the informal sector are consistent with a low-income population.
- Only 13% of YouthSave Ghana parents or guardians are employed in the formal sector, compared with 18% of adults in the general population (Ghana Statistical Service, 2008). Lower rates of employment in the formal sector are consistent with a low-income population.

Overall, these differences appear to indicate that the YouthSave Ghana Experiment has been successful in selecting a sample of low-income youth, the target population. This is important, because it means that data collected in subsequent surveys can demonstrate impacts of a youth savings intervention on this particular population.

Accordingly, next steps in the YouthSave Ghana Experiment research will include examining the potential influences of youth demographic and household characteristics on YouthSave outcomes. A primary question is: "How do youth and household characteristics

influence uptake of savings accounts and savings performance in the YouthSave Ghana Experiment?" Multivariate analysis of youth and household characteristics described in this research brief will be conducted to determine which youth and household characteristics have significant effects on saving and other related outcomes.

Additional analysis will investigate how youth and household characteristics may affect the impact of YouthSave on other youth development outcomes. We can determine if any individual or household characteristics buffer the potential relationship between the intervention in the YouthSave project and a range of outcomes—including financial, economic, educational, and health. Further, because youth's lives are situated around different social, economic, geographical, and cultural contexts, various explanations—both direct and indirect—on why and how a particular outcome occurs may be plausible. Establishing how individual and household characteristics interact with each other, directly or indirectly, is central to a better understanding the outcomes we may observe in the experiment.

The carefully designed research agenda of YouthSave, particularly the cluster randomized study currently taking place in Ghana, aims to address gaps in knowledge by providing high quality empirical evidence. Findings from the multi-method research agenda will help us understand youth and their savings preferences and performance, as well as the impacts of savings. The better we understand these preferences, the more effectively financial institutions and public policy can create savings products and services that meet youth's existing and future financial product needs.

## Endnotes

1. A compound house is one that has many rooms. It is located within a group of houses. The rooms normally have doors or entrances from the outside for direct access to the outdoors.
2. Sandcrete blocks are made of a mix of concrete and sand. Landcrete is a mix of concrete and wood.
3. The number of economic dependents includes youth participants.
4. The exchange rate used is 1 GHC=0.66 USD, approximately the rate during the time the baseline survey was conducted.
5. Statistical significance of this difference cannot be determined because the figures are from two different data sets.

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## Acknowledgements

This brief is a product of the YouthSave Project. Supported by The MasterCard Foundation, YouthSave investigates the potential of savings accounts as a tool for youth development and financial inclusion in developing countries, by co-creating tailored, sustainable savings products with local financial institutions and assessing their performance and development outcomes with local researchers. The project is an initiative of the YouthSave Consortium, coordinated by Save the Children in partnership with the Center for Social Development at Washington University in St. Louis, the New America Foundation, and the Consultative Group to Assist the Poor (CGAP).

## YouthSave Research Partners

### Washington University

George Warren Brown School of Social Work  
Center for Social Development  
Campus Box 1196  
One Brookings Drive  
St. Louis, Missouri 63130-4899

### University of Ghana

Institute for Statistical, Social and Economic Research  
(ISSER)  
Legon, Ghana

### Kenya Institute for Public Policy Research and Analysis (KIPPRA)

Nairobi, Kenya

### New ERA

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Bogotá, Colombia

### University of North Carolina

School of Social Work  
Chapel Hill, North Carolina

### Columbia University

School of Social Work  
New York, New York

## Suggested Citation

Chowa, G. A. N., Masa, R., & Osei-Akoto, I. (2012). *Youth in the Ghana Experiment: Characteristics and living conditions* (YouthSave Research Brief 12-35). St. Louis, MO: Washington University, Center for Social Development.