# Cataloguing Resources for Poverty Reduction in Armenia

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An Interactive Qualifying Project Report Submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the Degree of Bachelor of Science in cooperation with World Vision Armenia. Submitted May 13<sup>th</sup> 2021

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## Abstract

Our team researched multidimensional poverty and poverty reduction methods in Armenia. We collaborated with World Vision Armenia and developed a website that hosts a solutions library, printable resources for poverty prevention, and information on the purpose & distribution of the Poverty Stoplight survey. Our solutions library addresses the high priority needs of Armenians based on the Armenian Poverty Stoplight survey and is accessible to both NGOs and individuals who want to help break the cycle of poverty.

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## **Executive Summary**

Based on the poverty line metric, 25% of Armenians are impoverished. However, this number is not accurate as it doesn't consider aspects of poverty such as access to safe drinking water or healthcare. Another common metric of poverty is the Multidimensional Poverty Index (MPI) which estimates Armenia's poverty rate at 38%. This is a multidimensional metric comprising 83 questions that cover different aspects of poverty. The MPI is more representative of poverty but is unadaptable country to country, so portions of the survey aren't applicable to Armenia. As an increasing number of people are facing poverty due to the COVID-19 pandemic and the resulting economic recession, an effective targeted metric of poverty is increasingly necessary.

The Poverty Stoplight survey is an adaptable multidimensional metric designed to assess poverty. The survey is meant to be the first part of an iterative process designed to empower families to break the cycle of poverty by recognizing and taking ownership of their own needs. The survey is used to assess how families experience poverty in six main categories: Income and employment, housing and infrastructure, education and culture, health and environment, organization and participation, and interiority and motivation. Data can be compared between different locations since each of the surveys share 50 core indicators. The suggested indicators make it possible for the survey to be customized to individual locations. Families rank their experiences in the form of red (extreme poverty), yellow (poverty), and green (non-poverty) for each of the indicators. This allows the families and NGOs that receive the data to focus on the aspects of poverty that are most pressing and prevalent.

This project's goal was to support impoverished Armenians in addressing high priority, high impact needs that were outlined in the Poverty Stoplight survey. In order to do this, we broke this goal into three objectives:

- 1. Update the Poverty Stoplight survey to reflect the reality of poverty in Armenia
- 2. Create training videos to explain and use the tool
- 3. Design and distribute a solutions library that addresses the high impact, high priority needs in Armenia

In order to achieve objective one, we first ensured the indicators were properly tailored to Armenia by incorporating feedback from the team and sponsor. We deleted an indicator on insurance as it was not reflective of the Armenian healthcare system. We also edited the indicator on phones to make it more general and focused on access to a phone versus a specific plan or carrier. After making sure that the indicators were properly translated, we sent the edited indicators to the Poverty Stoplight technology team to be uploaded into the new version of the Poverty Stoplight application. This allowed the survey to be taken virtually and gave access to features like georeferenced maps and data analytics. The ability to use and distribute the Poverty Stoplight survey through a mobile application that can be used offline makes the tool accessible to any social worker or NGO in Armenia.

We then filmed three training videos. The first is a Poverty Stoplight video dubbed over in Armenian and describes the Poverty Stoplight survey and the philosophy behind it. This video gives social workers an overview of the program and helps them connect the new survey to their previous work. In the second and third videos, we walk the viewer through the application. The second video is a step-by-step guide on how to take or administer the survey. It can be used by social workers who want to familiarize themselves with the process or individuals who are interested in their poverty profile and want to take the survey. The third video explains the data analysis capabilities that the Poverty Stoplight app comes with. This video is mainly for social workers and the organizations who are interested in incorporating the Poverty Stoplight application in fieldwork.

To achieve our third objective, we broke down the indicators into seven themes: Education, finances, government, health, housing, morality, and utilities. Each team member rotated through researching the 24 indicator groups within the seven themes. To incorporate Armenian input, we interviewed seven individuals in six areas of expertise. We compiled all of this information into pages of a website built in WordPress. The research was also put into printable pamphlets, worksheets, and other resources for families that do not have regular internet access. We translated some of the pages into Armenian based on their relevance and importance. In addition to the solutions library, the website hosts the training videos, a demo version of the survey, and information for social workers, also in Armenian.

The Poverty Stoplight survey offers a new and innovative way to understand and solve poverty. Unlike most poverty prevention programs and tools, Poverty Stoplight places the responsibility of fixing poverty on the people who are in it. By providing them with the knowledge of their situations and ideas on how to fix it, people are empowered to break their cycles of poverty and can even serve as models for those around them.

The ability to use and distribute the Poverty Stoplight survey through a mobile application that can be used offline makes the tool accessible to any social worker or NGO in Armenia. Similarly, Armenian training videos make the survey accessible to individuals who only speak Armenian. These are the first videos made for Poverty Stoplight in Armenian, which will contribute to the spread of the survey's use.

As a result of the survey's multidimensionality and focus on empowering the families who participate in it, Poverty Stoplight has succeeded in addressing poverty in multiple countries such as Paraguay and Argentina. Hopefully, future Armenian NGOs and poverty reduction programs will also make use of the tool.

We recognize that survey results alone are not going to change the lives of those who are in poverty or help them break the cycle of poverty. The solutions library is a valuable resource for social workers and Armenian families alike after taking the survey and making a life map, but it is not a cure-all. It is a starting point and guide for families who may not know how to approach the situation or problem that is keeping them in poverty. It also serves as a resource for social workers to reference if they are unsure of how to help a family.

Our solutions library was designed to provide the most effective and relevant information possible and has been designed for future teams to edit with ease. As more people work on the project, and technology improves, new solutions can be added to help Armenians in poverty. We recommend expanding and continuing to fine-tune the intricacies of the solutions library by first assisting social workers in collecting field data. This would lead to improvements in the accuracy and relevance of information on the website.

Completed Poverty Stoplight surveys from families would enable enhancements to the solutions library resulting in information that is more credible and relevant. As previously mentioned, time constraints prevented us from going in-depth on certain topics because we relied heavily on recommendations from the interviewed professionals. All topics on the website were addressed through interviews or individual research. Continuation of such interviews coupled with field data from the Poverty Stoplight survey will yield an increasingly accurate bank of solutions.

Last year's sponsor, Orran, is currently using an adapted version of the survey incorporated into their existing intake forms. A future team should determine which indicators they added or excluded due to their involvement with Poverty Stoplight, and which indicators they previously covered in their survey. This would lead to an assessment of the differences between the original Poverty Stoplight survey and their adapted version, to determine the effectiveness of their version. Compiling this data could help tailor the solutions library and give feedback on future iterations of the Armenian Poverty Stoplight survey.

Additional advertisement of the website is needed in order for it to be viewed and thus useful to all intended parties. The promotion of the website could lead to new connections with other organizations that can provide more ideas and insights for the solutions library.

With more than a quarter of the population living in poverty, the health, and wellness of many Armenian people still suffer today. Addressing poverty begins with creating preventative measures to ensure it doesn't grow; curative solutions usually only help people in a particular moment. This is where resources such as the solutions library and the Poverty Stoplight program come in. Our solutions library builds off of this and provides resources and guides that are highly specific to particular dimensions of poverty. The solutions library also addresses this as most of the resources and guides are tailored towards individuals and families.

It's also important to recognize that poverty doesn't just stop at the borders of a single country. The poverty of one nation can affect its neighbors and even the world. As mentioned before, the global economy exists only because of the nations that make it up. When poverty is reduced, living conditions improve, lifespans increase, production rates rise, and nations are able to give back to those around them. This same principle applies to a family, and even an individual.

It can be incredibly hard to see how people thousands of miles away from each other are connected, but the people of Armenia are just like everyone else. They have culture and traditions, times of peace and war, and some really amazing food. While everyone may not be in poverty, we are citizens of places that likely have poverty in them. This project exemplifies why it's better to be the change and not the problem. If we perform a service to those around us, together we can all break the cycle of poverty.

## Prologue

In light of the 2020 COVID-19 pandemic, our project faced many last-minute adaptations. Initially, our project goal was to pilot the Poverty Stoplight survey in rural communities in Armenia by accompanying social workers who would administer the survey. We would then use this data to identify high-impact, high-priority needs, and design a plan for implementing and piloting a solution for one of these needs.

We were unable to travel to Armenia, and due to social distancing and the global quarantine, our sponsor WVA and group member Lilit Ghandilyan were unable to collect any first-hand data for the original project. Therefore, the main focus shifted to creating both a solutions library and training videos, as these are tasks that can be completed remotely, utilizing data collected in previous surveys, economic reports, and information from Armenian experts.

In order to obtain local Armenian input and ensure our project's relevance, we remotely interviewed professionals at Armenian NGOs and the American University of Armenia incorporating their advice into the solutions library. The training videos provide future social workers administering the survey with information about Poverty Stoplight, and how to deliver the survey. These training videos replaced the training that would have taken place in person.

Everyone during this point in time has been challenged with how best to work remotely. The project was originally set up to be completed in Armenia, so remote work made it difficult to portray an accurate representation of the culture and values; more than if they had been witnessed first-hand. We realize there is a possibility that information on our website is inaccurate or lacking because of the limitations a global shutdown poses on group work and travel.

These obstacles are minute, however, compared to the obstacles that families in poverty in Armenia had to face and will continue to face throughout the reverberating economic effects of the pandemic. No one knows exactly what the future holds or how best to prepare for it. Seeing as the target population for this project was these same families, we hope that through our work, we have been able to take steps towards helping alleviate the impoverished circumstances under which many Armenians live today. Ideally, our work with Poverty Stoplight and World Vision Armenia will empower families to take control of the needs that have been exacerbated by a time of worldwide sickness and fear.

## Introduction

Almost 750,000 people in Armenia are currently living in poverty as a result of tensions with neighboring countries, the 1991 recession following Armenia's Declaration of Independence & the dissolution of the Soviet Union, and the devastating 1988 Spitak Earthquake. Some individuals survive on less than \$1.90 per day (Elmer, 2019). This is nearly 25% of the country's population, but likely an underestimate as this metric for poverty is only based on income levels and the value of one's estate. This definition does not consider qualitative factors such as access to clean drinking water, illiteracy rates, or personal hygiene.

Poverty is multidimensional and encompasses these and many other aspects of an individual's life, not just their net worth. In order to identify the factors of poverty in Armenia, a multidimensional approach must first be introduced at the local, municipality level. A multidimensional approach for describing poverty in Armenia is critical because it describes poverty in a way that is specific to the needs of each family. Using information collected in the survey, the individual needs of each family can be addressed with solutions that are personalized to fit them.

Our sponsor, World Vision Armenia (WVA), is an NGO and has been investigating poverty since 1988. In recent studies, they have also begun using a multidimensional approach. Although these surveys have considered many different factors of poverty, the use of a more comprehensive poverty assessment tool will more accurately represent poverty. We will be working with WVA to research the various aspects of poverty in Armenia with a much more specific tool, the Poverty Stoplight survey.

The survey, developed by Fundación Paraguaya, contains a set of core indicators that outline the distinct levels of deprivation a family may face for specific aspects of poverty. This application was adapted by last year's IQP team to include indicators for Armenians in order to improve poverty assessment. That team then tested and validated the entire indicator set by piloting it with 80 families. Last year's IQP team did not test this tool within a large community, and as such, it still needs to be piloted to create an accurate representation of poverty in the country. The main goal of our project was to assist Armenians in addressing high-priority, highimpact needs that are identified by the Poverty Stoplight survey, in previously collected data, and interviews. We are working to develop materials that help impoverished families in any community in Armenia.

To achieve this, we first reviewed all of the indicators outlined in the survey and created a functional app for surveying in English and Armenian. Once the application was completed, we reviewed each indicator and researched effective solutions that could help alleviate specific issues. We worked with WVA and determined if the indicator was feasible to address. Some indicators deal with large-scale social issues that we were not able to address remotely. Afterward, we created a solutions library that documents the steps, resources, tools, and all other materials needed to help families leave the cycle of poverty. The information for this solutions library is being hosted on a WordPress website sponsored by WPI under Prof. Aaron Sakulich. Visitors are also able to download printable resources from the solution pages.

Additionally, we created a series of training videos in Armenian on how to use the Poverty Stoplight application, and how the Poverty Stoplight program itself works. These videos have been made available on the website for everyone to view, however, their main purpose is to inform the social workers who can deliver the survey at a later date. The English version of the application will be useful for future sponsors, project groups, and WPI community members to better understand this project.

The future use of this tool, training videos and the solutions library will allow World Vision Armenia to implement further community development projects by establishing a snapshot of how poverty is experienced throughout all of Armenia.

## Background

#### History of Armenia's Poverty

Armenia is one of the oldest countries in the world, dating back to 3,000 B.C., and as such its history is filled with triumph and plagued by hardship (Bournoutian, 2013, pg. 9). In the late 20<sup>th</sup> century, Armenia's economy disintegrated as a result of the Soviet Union's collapse, Spitak earthquake, Artsakh (Nagorno-Karabagh) conflict, and political corruption (Bournoutian, 2013). Many of the events described below explain how the modern Republic of Armenia and its economy formed.

Russian oppression of Armenians by Tsar Nicholas II ceased in the 1910s followed by political moves to regain Armenian favor (Herzig, 2005, pg. 90). Prejudice against Armenians began to grow and in 1912 the Ottoman Empire's Young Turk Party developed schemes for "dealing with the Armenian problem" (Herzig, 2005, pg. 91). In 1915, with the veil of World War I protecting them, the Young Turks and their allies systematically killed a majority of the Armenians throughout their empire; they were removed from their jobs, homes, and offices, tortured and executed (Herzig, 2005, pg. 92). Following these events, the neighboring countries of Azerbaijan and Georgia declared their independence, and soon afterward Armenia declared its independence as the Republic of Armenia in 1918. However, due to years of war and the recent genocide, the Republic succumbed to the Soviet Union in 1920/21 (Herzig, 2005).

During Soviet rule, Armenia saw the growth and development of its economy with the introduction of the New Economic Policy (NEP) in 1921. Armenians dispersed all over the world began traveling back to their homeland in search of new opportunities. Armenia's economy and population were rapidly expanding, and in 1928 Joseph Stalin installed a new economic system that transformed Armenia from a country of villages and homesteads to industrialized cities and towns (Herzig, 2005). There were trade routes, factories, imports, exports, and most importantly, jobs. Armenia's economy was booming, and it was entirely based on connections and ties with the surrounding Soviet states. Armenia remained a part of the Soviet Union for 70 years until its collapse in 1991 (Bournoutian, 2013). Following the dissolution of the USSR, Armenia claimed its independence for the third time, once again becoming the Republic of Armenia.

Establishing an economy independent of the Soviet Union caused a recession (Bournoutian, 2013) which started in 1990, and lasted until 1994 (The United Nations, 2005). As part of the Soviet Union, "Armenia's workforce categorized as industrial workers grew from 13 percent to 31 percent" at its highest (Curtis & Eldon, 1995, pg. 42). By the mid-1930s, 62% of Armenia's economy was based on industry, much of which was dependent on the Soviet Union. When the nation gained independence in 1991, most of its ties with the other Soviet states were cut. The infrastructure provided by the Soviet Union caused the connections between these states to destabilize. As a result, industry decreased in size by 60 - 80% and all the industries that had previously bolstered the economy disappeared (Curtis & Eldon, 1995).

In addition to the fall of the Soviet Union, a war broke out between Armenia and neighboring Azerbaijan, known as the Artsakh (Nagorno-Karabagh) Conflict. Tensions between the two ex-Soviet states had been rising since 1921 when the Soviet Union's government decided that Artsakh would be a self-governed subordinate state of Azerbaijan. The decision was mainly political, as Russia did not want to jeopardize its relationship with Turkey. This decision was made despite Artsakh's (Nagorno-Karabakh) population being 93% Armenian at the time; additionally, many Armenians in this region claimed historical ties to the area dating back to the 13<sup>th</sup> century. When the Soviet Union collapsed, an internal war between the two ex-Soviet states developed into an international conflict between two independent countries. Conflicts broke out throughout Armenian-populated cities in Azerbaijan and Artsakh, leaving thousands dead, and hundreds of thousands of others displaced. A cease-fire was signed in 1994 between Armenia, Azerbaijan, and Artsakh, after a push from multiple peace-seeking groups. Despite this, skirmishes still occur along the border, and hostility between the two countries remains today (Bournoutian, 2013).

The tension caused by the Artsakh (Nagorno-Karabagh) conflict and over 200 years of history has strained Armenian's relationships with both Turkey and Azerbaijan (Mammadov, 2011). These countries have closed their borders with Armenia, leaving only two available trade routes, either through Iran or Georgia. Iran has a protected internal market (single market) for imported goods. Iran is also a member of the Economic Cooperation Organization (ECO), a trade bloc that does not include Armenia, which significantly reduces the total volume of exports to Iran. This leaves Georgia as the only large land trade-route for the country (Mammadov, 2011). With limited trading routes, Armenian businesses, and industry decreased in size, thus slowing

Armenia's economy (Tiwari, 2018). The Armenian government then had fewer resources to spend among other areas such as social welfare programs, which led to increased poverty.

Along with these conflicts and regime changes, Armenia faced a catastrophic earthquake known as the Spitak Earthquake on 7 December 1988. The 6.8 magnitude earthquake "devastated Northern Armenia, killing at least 25,000 people and rendering hundreds of thousands homeless" (Herzig, 2005, pg. 122). Businesses and industries were also wiped out by the earthquake, leading to increased rates of unemployment and poverty. Some of the businesses have yet to be rebuilt, showing that the economic hit that the earthquake caused still reverberates throughout Armenia (Goenjian et al., 2018). The earthquake also caused a large influx of governmental aid spending to help those directly affected by the disaster, which decreased Armenia's spread of resources for other social welfare programs and resulted in increased poverty.

Armenia's poverty rate is still affected by these issues. The inability to trade has greatly reduced economic growth. This has resulted in a mass migration of around 15% of the working population from the country during the 1990s. A reduction in the workforce exacerbated problems in the Armenian economy, as now there are fewer employers to work for and start businesses in the country (Antinyan, 2018, pgs. 1-2). Armenia's 1988 Earthquake further increased strain by detracting spending from various other areas in the country. Altogether, these issues have led to widespread poverty throughout the nation.

The historical context of Armenia's poverty is important to recognize because it sets the stage for why so many citizens currently remain troubled. In addition to this, Armenia's struggles have played a critical role in forming the Armenian identity. This identity unifies Armenians and has been a powerful tool throughout their continued struggle with the surrounding countries. It has also been crucial in keeping the Armenian people together despite the events they have suffered in the past few decades.

From a macroeconomic standpoint, Armenia's poverty also affects the global economy. When poverty goes down, production goes up, human lifespans tend to increase, and as a result, this leads to healthier and more robust economies, which in turn reduces poverty, and again contributes to increasing economies on a global scale (Kotler, 2009). It is important to recognize that the global economy exists because of all the countries that contribute towards it. Despite its contributions to global trade, much of Armenia remains impoverished, making it a perfect candidate for implementing poverty reduction programs. These historical factors have led to large portions of Armenia facing poverty, with the exact number depending on the metric used to define it.

#### What Is Poverty?

How does one define poverty? Poverty was first defined unidimensionally in 1963 as part of President Johnson's War on Poverty, through the establishment of a poverty line. A poverty line is the bare minimum amount of money needed to cover basic necessities in the national economy ("How the Census Bureau Measures Poverty", 2019). Based on a national poverty line, 25.7% of Armenian's are poor (Inan, Meyers, Martirosova, & Sinah, 2017). However, this metric is not representative of modern economies, as it has not been adjusted beyond inflation since being established (Manna, 2012, pg. 11). Poverty lines don't take into account variances in the cost of living throughout a country (Manna, pg. 11). Another key issue is that poverty lines don't account for variability in families' financial obligations, such as medical expenses or supporting elderly members (Manna, 2012, pg. 12). This means that poverty lines vastly underestimate the portion of the population that is poor. Poverty lines are also not useful metrics for trying to alleviate poverty. They don't contain information on why people are poor, making it difficult for national governments to try and prioritize poverty prevention and intervention programs (Manna, 2012, pg.13).

The alternative to unidimensional poverty lines are metrics that estimate multidimensional poverty. These metrics are used to compile data on a variety of aspects of poverty including the experiences of the poor. Survey design is a major consideration, as the aspects of poverty that the metrics consider directly affect the levels of poverty that are estimated from them. The most common metric is the Multidimensional Poverty Index (MPI). The MPI is a survey used internationally that focuses on health, education, and standard of living (Pasha, 2017, pg. 113). The survey evaluates the number of deprivations the household is experiencing in these three sectors and then renders them into weighted percentages. Based on the 2016 MPI study, 38% of Armenian's are poor (Mnatsakanyan, 2018, pg. 176). Some problems with the MPI are that the survey is not adaptable to fit the region's economy, for instance, Armenian's not having hurricane insurance is not indicative of poverty but rather that Armenia is landlocked (Pasha, 2017, pg. 113). Poverty in low-income countries is very different from poverty in middle- and high-income countries. The survey needs to reflect that, otherwise, large parts of it are not applicable. Another issue is strict requirements for the data from the MPI to be applicable. The entire survey must be completed for the data to be valid. The data collected from the MPI survey is then run through a data analysis matrix, which makes the data incomparable to other poverty assessments, even previous versions of the MPI survey (Pasha, 2017, pg. 114). It is because of this that the MPI has no usable data before 2006 even though it was first implemented in 1990 (Pasha, 2017, pg. 115). A more modern metric of multidimensional poverty is called the Poverty Stoplight survey.

The Poverty Stoplight survey is an adaptable multidimensional metric designed to assess poverty. The survey is meant to be part of an iterative process designed to emphasize the role of poor people in reducing poverty by empowering families to recognize and take ownership of their own needs (Figure 1). The survey is used to assess how families experience poverty in six main categories: income and employment, housing and infrastructure, education and culture, health and environment, organization and participation, and interiority and motivation (Burt, 2019, pg. 40). Data can be compared between different locations since each of the surveys share 50 core indicators (Burt, 2019, pg. 39). The suggested indicators make it possible for the survey to be customized to individual locations (Burt, 2019, pg. 40). The head of a household ranks the family in each indicator by the colors red, yellow, or green; red indicating extreme poverty, yellow poverty, and green non-poverty. After completing the survey, the families receive a life map that allows them to visualize where they are and key areas they need to develop (Burt, 2019, pg. 42).

By breaking down poverty into smaller distinct categories, this survey makes the problem less overwhelming for the family which allows the families to create concrete goals to alleviate their poverty (Burt, 2019, pg. 42). Information from a certain region can also be compiled that allows nonprofits and governmental agencies to target their programs to the needs of that region. The process is meant to be repetitive, with follow up interviews of the families. NGOs and government agencies can develop metrics to determine how effective their programs are. For example, an NGO can measure the effectiveness of a program by measuring how many families that participate in the program become green in the related indicator. The PSL tool is currently implemented in over 20 countries around the world and has recently made its way to Armenia through a connection between WPI and the founder of Poverty Stoplight, Martin Burt.



Figure 1: The reiterative process that Poverty Stoplight recommends for eliminating poverty (Burt, pg. 62)

#### **Poverty Reduction Methods**

Just as Poverty Stoplight uses a multidimensional approach to identifying poverty, so must any effective attempts to address poverty. Recently, attempts by the Armenian government to reduce poverty have been focused on increasing economic growth, and have been unsuccessful as seen by an average poverty level of 25% since 2011 (Inan, Meyers, Martirosova, & Sinah, 2017). As a result of this lack of success, worldwide institutions have attempted to step in to improve the economy and thus reduce poverty in Armenia.

The World Bank Group and the International Monetary Fund are both international organizations that work to improve financial stability and create consistent labor markets around the world. They provide informative reports containing recommendations to attain these goals, in ways that are both general and specific to Armenia. The intentions of these institutions concerning the alleviation of poverty are questionable, because in South American countries (notably Argentina) they have been criticized for being the cause of "intrusive conditional loan agreements, skyrocketing debt, and imposed economic liberalization" (Kedar, pg. 184). Nevertheless, the factual data found in their reports provide helpful views of the economic and social situation of particular areas.

A sourcebook published by the World Bank defines four main elements of empowerment within a set of five significant areas of poverty reduction. The four empowerment elements the report highlights within the five focus areas are information, accountability, inclusion/participation, and local organizational capacity, and the five important focuses are access to basic services, improved local governance, improved national governance, pro-poor market development, and access to justice and legal aid (Narayan, pg. 24).

A more detailed World Bank report about economic and social mobility in Armenia provides specific recommendations that the organization believes are the most powerful ways for Armenia to lower national poverty. Some of these include enhancement of basic services like heating and running water, connectivity improvements between Yerevan and secondary cities, and enhancing the quality of education to produce better learning outcomes and provide skills training to match labor force needs (World Bank Group, pg. 70-76).

Similarly, the International Monetary Fund produces periodic country reports containing Poverty Reduction Strategy Papers (PRSPs) analyzing methodologies and effectiveness behind current strategies of poverty elimination. They also provide solution recommendations about implementation, monitoring, and evaluation. The majority of the development goals they outline in their most recent report relate to economic development strategies: How the country can create and maintain sustainable income rates and provide employment/hiring equity within the labor force (International Monetary Fund, pg. 35-41).

Ideally, by focusing in a certain area and on at least one of the empowerment elements, programs can be created and implemented that will have a high likelihood of positively impacting the poor population in that area. The idea behind the empowerment elements aligns with Poverty Stoplight's goal and vision: When impoverished families can visualize and take responsibility for their situation, they are able to lift themselves out of poverty. Families being involved in their future rather than having their future dictated by an external institution increases the effectiveness of anti-poverty measures.

Non-governmental organizations, foundations, and funds local to Armenia have different approaches to poverty alleviation. Many organizations and programs like local youth centers focus on prevention of poverty rather than reduction or a cure. Preventative measures curb the problem before it arises, and end up costing less in terms of money, time, and resources (H. Lylozian, personal communication, April 2, 2020). For example, the Children of Armenia Fund's SMART program and Orran's CHILD program both provide educational opportunities for youths to expand their social networks, invest in their future, and provide experience for community involvement (Children of Armenia Fund, n.d., Orran, n.d.). By equipping the country's younger generation with important life skills, Armenia is attempting to avoid growth in poverty rates when these children become working adults.

It is important to balance the professional advice in reports and local evidence of what works with actual input, needs, and desires of the citizens in a target population. Taking into account how a community is empowered, programs can be built that result in the participation and support of the community. In this way, incorporating these ideals with the use of the Poverty Stoplight tool, effective alleviation of poverty is possible.

#### World Vision Armenia

Our sponsor, World Vision, is a Christian humanitarian organization active in around 100 countries. World Vision's work is mainly focused on providing nutrition, education, and water for children in impoverished communities, especially in conflict zones. One of their goals is the

"economic empowerment and poverty reduction" (World Vision Armenia, 2020). Recently, they have been taking a more holistic approach in helping children in poverty, aiming at the development of the communities rather than focusing solely on the children.

World Vision has been in Armenia going back to 1988 when they were involved with providing humanitarian aid after the devastating Spitak earthquake. Besides the aid, they launched their first 'Child Sponsorship' project in Gyumri. Now, World Vision has 15 offices in different cities of Armenia and has affected nearly 50,000 Armenian children's lives. Their main projects in Armenia have been aimed at child development and health, positive parenting, child rights protection, and youth empowerment. To help children break out of the cycle of poverty, World Vision Armenia implements projects providing arts and crafts, as well as IT education preparing them for the job market and skills needed for self-sufficiency.

Besides the many development projects of World Vision Armenia aimed at children, there have been several implemented for the economic development of rural families, refugees, and families living in Armenia's remote areas. One example, called "Building Sustainable Livelihoods in Tavush" promoted market-oriented and diversified agriculture. Many communities in Armenia and especially in remote areas like Tavush are impoverished because of the lack of communication and lack of dissemination of agricultural knowledge and expertise. The project included supporting local businesses to create jobs as well as organizing vocational training for the farmers. Vocational training varied from modern farming to beekeeping. In the scope of the project drinking, water, and irrigation systems were also renovated or newly installed in around 30 communities.

Another successful project example implemented by World Vision Armenia for poverty reduction was aimed at promoting culture and tourism in the Vayots Dzor and Gegharkunik provinces. The project created employment opportunities for many locals by expanding tourism while contributing to the promotion and revitalization of the Armenian culture and heritage in these regions.

World Vision Armenia has participated in the project of adapting the Poverty Stoplight indicators to Armenia and has decided to test the newly developed tool's efficiency and accuracy in gathering reliable and insightful data on Armenia's poverty. The Poverty Stoplight can be a powerful tool for our sponsor to understand Armenia's poverty which is crucial in implementing successful projects aimed at poverty reduction.

#### **Empowering Armenians Through Poverty Stoplight**

Our project is a continuation of the 2019 Interactive Qualifying Project, "Empowering Armenians Through Poverty Stoplight". The goal of last year's project was "to customize and pilot the Poverty Stoplight indicators specifically to the needs of the Armenian people to empower impoverished families to lift themselves out of poverty" (Carregal, Cunniff, & Shubert, pg. 2). The team performed research on what poverty looked like and how it was measured in Armenia and other countries around the world. They discerned the operational concepts of Poverty Stoplight and talked to Martin Burt about his vision for their project: To mobilize families through action plans they create to address their own needs.

Last year's IQP team took steps towards creating an effective, near-fully operational Poverty Stoplight application. However, at the end of their project, the app still contained glitches and bugs that rendered it unsuitable as an operational tool. The team customized and refined the tool from the initial set of baseline indicators provided, to contain accurate poverty indicators specific to Armenia. A final set of indicators was adopted by comparing successful Poverty Stoplight surveys/tools in other countries, as well as conducting interviews with locals. The IQP team was then able to test the tool for validity and reliability by surveying a sample set of families from three different places in Armenia: Vanadzor, Yerevan, and Dilijan. We added to the resources available for future teams and organizations to utilize before, during, and after the survey administration process. The resources include videos, a website, and printable pamphlets, which will allow all involved parties using the Poverty Stoplight tool to better administer the survey, analyze the data, and take action towards possible solutions to needs.

## Methodology

#### **Project Goal & Objectives**

Our goal was to support Armenians in addressing high-priority, high-impact needs identified by the Poverty Stoplight survey. In order to do this, our objectives were to:

- Objective 1: Update the Poverty Stoplight survey to accurately reflect poverty in Armenia
- Objective 2: Create training videos to explain and use the tool
- Objective 3: Design a solutions library addressing high-priority, high-impact needs in Armenia

We worked with the Poverty Stoplight organization and WVA to finalize a working survey application containing indicators adapted to Armenia. To best prepare WVA social workers to administer this survey, we recorded training videos detailing what the Poverty Stoplight tool does, how it makes a difference, how a person should take the survey, and how organizations administering it can analyze the aggregated data from these surveys. We interviewed Armenian professionals who are involved in the various subjects that the survey addresses, to inform our decision about the indicators and information on which we should concentrate our efforts on. The solutions library includes printable materials for families who do not have regular internet access. The website was circulated to increase traffic and awareness through email and WVA's Facebook page and website. The block diagram provides a visual representation and clarification of how we split up and approached our objectives (Figure 2).

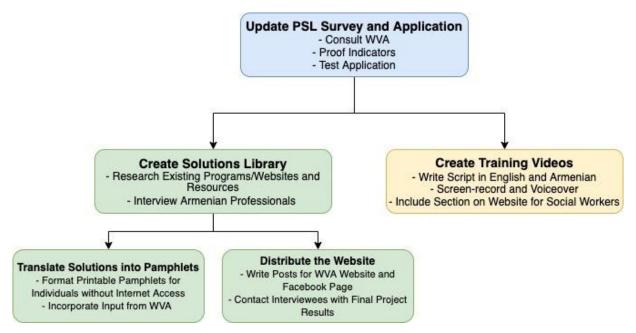


Figure 2: Block Diagram - A timeline depicting our objectives and path of action. The blue represents Objective 1, yellow Objective 2, and green Objective 3.

#### **Review the Poverty Stoplight Tool & Application**

In order to assess poverty in Armenia in the future, we updated the Poverty Stoplight Armenian survey developed and validated by last year's IQP team (Carregal, Cunniff, & Shubert, 2019). This survey contains detailed information on a variety of aspects of poverty and how each surveyed family experiences poverty. To ensure that the indicators reflect poverty in Armenia, the team and our sponsor gave feedback on the indicators. After incorporating the feedback, we sent the indicators to our contact on the Poverty Stoplight technology team in a specific spreadsheet format, to be uploaded into the new version of the Poverty Stoplight application. Ana Paula Rojas Cosp, the Technology Coordinator, walked us through an hourlong demonstration by sharing her screen to help us understand every aspect of the Poverty Stoplight application.

The application contains a pre-survey, the main survey, and a life map, which takes each family approximately 45 minutes to complete altogether. The pre-survey contains demographic and geographic information meant to index data from the survey. The main body of the survey contains 55 indicators separated into six categories: Income and employment, housing and infrastructure, education and culture, health and environment, organization and participation, and interiority and motivation. The survey questions are answered by the head of the household, who ranks how the family feels about their circumstances. For each indicator, the family decides if

they are best represented by red, yellow, or green; red indicating extreme poverty, yellow poverty, and green non-poverty (Burt, pg. 42). As an example, for the core indicator of access to water, red would mean no access to safe water, yellow would mean spotty access to safe water or having to buy bottled water, and green would mean regular access to safe water. The survey also has visuals to assist people who cannot read (Figure 3) ("Poverty Stoplight", 2017).

After taking the survey, a visual map is produced by the app for the families to help them interpret and visualize their answers. Social workers can then help them develop a life map in which the families outline how they are going to work towards their prioritized indicators, strengths, and goals (See Figure 4) ("Poverty Stoplight", 2017).

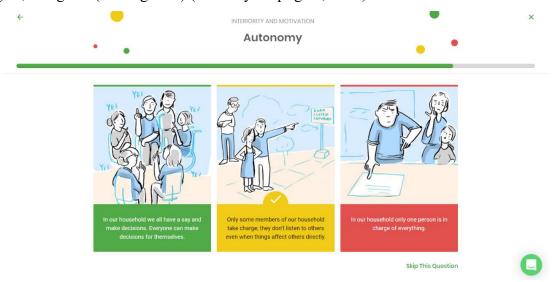


Figure 3: Survey Body - An example survey question on autonomy from the Armenian version of the Poverty Stoplight survey (Fundación Paraguaya, 2020)

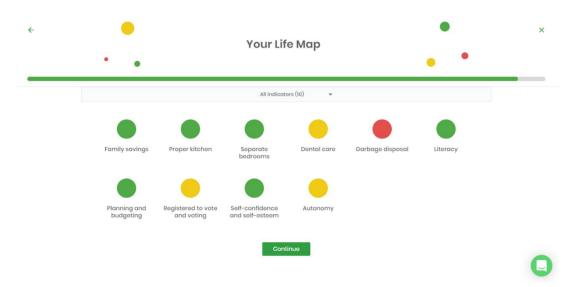


Figure 4: An example life map, which helps families assess their priorities, strengths, and goals (Fundación Paraguaya, 2020)

#### **Create Training Videos**

Before the survey can be given to families, social workers from Armenia must learn how to effectively administer the survey to families to obtain accurate data while respecting the family's privacy. We used clips from the Poverty Stoplight Organization's promotional videos that describe the Poverty Stoplight survey, the philosophy behind it, and how it works. This will also help social workers connect the new survey to their current work. We wrote scripts in English and Armenian to accompany a step-by-step screen recording that guides the viewer through the administration of the survey. We also created a video describing the data analysis process, and how to take full advantage of the application's data management capabilities. We have included these videos in a 'training package' for future use by WVA or other organizations, accessible through our website.

#### **Develop Solutions Library**

We have designed an online solutions library addressing high-priority, high-impact needs. These needs were identified using existing poverty data from Armenia, limited survey data collected last year, and interviews from Armenian professionals in fields related to the indicators. The interviews gave us a good idea of the most pressing needs for impoverished Armenians. To further narrow down which indicators we provided resources and information for, we categorized the indicators from the Poverty Stoplight survey into seven themes: Education, finances, government, health, housing, utilities, and morality. We rotated researching resources and writing up preventative measures in all of the categories, prioritizing those indicators identified as more significant through the interviews and data.

We collaborated with WVA to assess the most useful format of the solutions library and solutions therein, which we determined to be through a website built by using WordPress. We used the Polylang plugin to create the website in both English and Armenian, and the Formidable plugin to get user feedback. We also used the Divi plugin for formatting and creating portfolios. In addition to the solutions library, the website hosts the training videos, a demo version of the survey, and information for social workers.

Each need in the solutions library is accompanied by resources for families to use to achieve the goals they set on their life map. These resources include existing programs they can get involved in, contact information for organizations, government agencies that are

knowledgeable on the subject or who can offer assistance, and any other general suggestions that may be helpful. We conducted interviews with social workers and professionals who had previous experience in the respective indicator categories and are knowledgeable of the Armenian society. The interviewees chosen were those with close relationships with the previous year's IQP team, as well as professors at AUA teaching about topics related to the indicators in the Poverty Stoplight survey. Questions were developed by recognizing gaps in our research because some information is difficult to find online as a result of being in Armenian or not well documented. For example, we asked an AUA professor who teaches on civil rights and public policy if she had resources related to workers/employers' rights in Armenia. In this way, the resources we obtained through interviews guided our research and helped us understand what kind of information would be most useful to include on each web page of the solutions library.

We also created printable pamphlets, worksheets, and other resources for families that do not have regular internet access. These resources are provided in English and some are in Armenian, which serves as an example for future teams to continue the translation of all the resources into Armenian.

Finally, we distributed information about our website so that it could be as accessible as possible for the intended audience. We contacted the Armenian professionals who were able to contribute throughout the interview process and asked if they would be willing to share the solutions library if the chance arises. We also worked with WVA to write an article for their website introducing the resource, as well as posting a similar announcement along with a video describing the website on their Facebook page. In this way, the Armenian public, social workers, and NGOs can use the resources we've compiled to inform decisions and plans of action to address poverty in Armenia.

## Results

#### **Poverty Stoplight Tool & Application**

Following last year's adaptation of Poverty Stoplight indicators to accurately represent Armenia, we made final edits to the format and Armenian translations. Only two indicators needed changes: Insurance and access to a telephone. The Armenian healthcare system does not rely heavily on insurance; thus, the indicator was not indicative of poverty. Changes to the indicator about phones were based on making sure that the indicator is not coming from a place of privilege, and truly reflects Armenian phone use. The "green" level, or no poverty, previously specified certain types of phone plans, such as having unlimited data. Green in the revised indicator focuses on a person having access to a phone and the ability to contact whoever is needed instead of specifying a phone company or plan.

The Poverty Stoplight tech team put this updated information into the newest version of the online application. Social workers are now able to use the mobile application in the field without fear of crashes or data loss to deliver the Armenian Poverty Stoplight survey, thereby cutting out the need for printed surveys used in 2019. The finalized Poverty Stoplight application has different capabilities for the survey-taker and the facilitator/administrator. There is separate login information to take the demonstration version of the survey provided on the website and to collect and store real surveys and data from the field. We or the Poverty Stoplight technology team must be contacted for the fieldwork login information. The survey-taker only has access to the survey questions and life map, while a facilitator/administrator can deliver the survey and see the aggregated post-survey data. Through the user account, an organization has access to all the information gathered by the facilitators. A geo-referenced data map and an analytics dashboard are available through the online application (Figure 5). This user can also download survey reports as Excel spreadsheets. An overview of all the indicators by their dimensions is also available (Figure 6). This dashboard also shows the number of families that have selected an indicator as a priority (pins on the far right).



Figure 5: Example dashboard on the Poverty Stoplight Application. It shows the number of survey respondents, and the number of red, green, and yellow answers collected (Fundación Paraguaya, 2020)



Figure 6: Data aggregated by indicator dimension, from the application dashboard (Fundación Paraguaya, 2020)

The Poverty Stoplight survey has never been administered electronically in Armenia, so this application allows incoming data to be processed much more efficiently. The ability to use and distribute the Poverty Stoplight survey through a mobile application that can be used offline makes the tool accessible to any social worker or NGO in Armenia. Unlike a paper survey, which can only be used once per copy, the mobile survey can be distributed as many times as needed during one trip into the field. The survey is just as easy to read in the mobile application as on paper and comes with the added benefits of GPS tracking, as well as data storage, organization, and analysis. A demo survey can be taken on the online platform by anyone interested, which was not possible before. Overall, the application lends itself to greater flexibility for all of its users.

#### **Training Videos**

In an effort to give future teams, Armenian NGOs, and individuals the opportunity to use the Poverty Stoplight survey, we developed three training videos explaining what Poverty Stoplight is and how to use the application. The first video comes from an existing Poverty Stoplight video that we dubbed over in Armenian and for which we created English subtitles. It explains what Poverty Stoplight is and why the survey is exciting and useful. This was recommended by our sponsor to try and engage social workers and relate the survey to their current work.

The second and third video visuals are based on us walking the viewer through the application. The second video is a step-by-step guide on how to take or administer the survey. It can be used by social workers who want to familiarize themselves with the process or individuals who are interested in their poverty profile and want to take the survey. The third video explains the data analysis capabilities that Poverty Stoplight comes with. This video is mainly for social workers and the organizations who are interested in incorporating the Poverty Stoplight application into fieldwork.

These videos together provide information for NGOs thinking about implementing the Poverty Stoplight survey and individuals who find the website and want to take the survey. The Armenian training videos make the survey accessible to individuals who only speak Armenian. These are the first videos made for Poverty Stoplight in Armenian, which will contribute to the spread of the survey's use. They will also reduce the amount of time and resources that NGOs need to spend training their social workers to use the application. We plan on giving these materials to our sponsor, WVA, as well as putting them on our website in the Poverty Stoplight section that also has a demo version of the survey.

### **Solutions Library**

By incorporating results from interviews and feedback from WVA, as well as extensive research, we were able to design a solutions library website, accessible to the general public as well as social workers and NGOs in Armenia. This solutions library contains useful information

about various indicators outlined in the Poverty Stoplight application. The six categories and 21 subcategories we included are:

- 1. Education Child Labor, Informal Education, Receiving and Education
- 2. Finances Debt, Job Skills, Planning
- 3. Government Civic Engagement, Personal Identification
- 4. Health Healthcare, Nutrition, Selfcare, Vaccinations
- Housing Appliances & Cooking, Quality of Housing, Community/Entertainment, Stable Housing, Domestic Violence
- 6. Utilities Electricity, Gas & Heat, Sanitation & Water, Transportation, Waste

Including these categories helped give the website structure and reduced the amount of redundancy in information on different pages of the solutions library. While the way the indicators are categorized in the survey is effective for its purpose in the field, we have developed the website to be more streamlined and user-friendly, with fewer pages to sift through and consolidation of like information. Since there are 55 indicators in total, many were combined, and others were taken out of the solutions library completely. As a result of interview information and time constraints, we removed indicators that were a lower priority for Armenians in poverty, and indicators for which we did not find enough information to feel confident presenting on the website. We chose not to focus on the previously mentioned morality category, as the information from research and interviews gave more insight and resources for the other six categories. For the same reason, we chose to hide the clothing page in the health category and the phone's page in the utility category.

These 21 groups are the focal points of our website. The information about them has mostly come from the interviews conducted with professionals in Armenia. We held seven interviews with individuals in six different areas of expertise. Our first interview was with Dr. Hratchia Lylozian, a Research Associate at AUA and the Turpanjian School of Public Health. Dr. Lylozian provided insight into the Armenian healthcare system and current programs in place to improve access to healthcare in rural areas. He explained some of the problems he saw in the country's healthcare system and provided us with some resources to possibly include on the website. Dr. Lylozian's best piece of advice was for us to focus the website on preventative solutions rather than just treatment options. Since this website is meant to be informative, we believe it makes more sense for it to be used to promote best practices rather than just fixes for different issues.

Our second interview was with Ms. Hasmik Jinanyan, the Vanadzor Center Operations Coordinator at Orran. Ms. Jinanyan played an integral role in working with last year's IQP team and provided us with some of her thoughts on the most critical issues Armenians face today. She explained that many Armenians are unemployed because they do not know their worker's rights as Armenians. The current language and documents that outline the rights of an employer and employee in Armenia are thick and ambiguous. Some individuals do not have access to documents outlining those rights, and others who are unfamiliar with complex legal vocabulary and writing style would not be able to clearly understand the current documents available on the internet. Our job skills page includes this information with fewer technical terms and contacts to reach out to on this subject. Ms. Jinanyan also suggested that we should not just place resources on our site but that we should provide tips, suggestions, and advice as well. This will help prevent Armenians from becoming dependent on support lines and will encourage them to take steps to help themselves first.

The third interview conducted was with Prof. Yevgenya Paturyan, a Professor of Political Science at AUA. Prof. Paturyan explained that Armenia's current government is very new, not only because of the Velvet Revolution but also due to the shift to a parliamentary system. The whole country is trying to solidify what it means to be a citizen, to be publicly involved, and to be engaged with local government. She helped to provide resources and knowledge on the current political landscape, and why citizens may choose not to participate in civic engagement activities. One of the biggest issues that Prof. Paturyan sees is a lack of education on what civic engagement is to an Armenian. She explained that for many individuals, the idea of being engaged could mean different things. One of her biggest pieces of advice was to ensure solutions focus on helping at a municipality/community level.

Our fourth interview was with Prof. Harutyun Alpetyan, a Waste Management Expert and Adjunct Lecturer at AUA. Prof. Alpetyan introduced us to the dilemma of waste management in Armenia. He explained that the most significant problems in this area are the lack of separation of types of waste, accessibility to landfills, and a general lack of incentives for citizens to keep the environment clean. Prof. Alpetyan described the use of open burning to easily and quickly source scrap metal as a problematic source of pollution. Throughout the interview, we learned that many citizens throw wet waste (food and other organic substances) in dumpsites rather than composting. Among the many other issues, he brought up he suggested that we look at these dilemmas from a local level just as Prof. Paturyan advised. Prof. Alpetyan explained that simply asking citizens to separate wet waste from dry waste could help people realize the value of their waste. They could sell metals, plastics, and paper materials to other communities or recycling companies. For many villages, this is an act that comes without much cost. Villagers just need to sort through waste and place it in a dry location until it can be picked up, or it can also be delivered. All of these materials would end up in illegal dumpsites if not, so there are very few downsides aside from convenience. His insight provided us with information on better treatment of the environment and waste reduction as a way to prevent negative human health effects. Additionally, his advice confirmed that our solutions library should be focused on how individuals need to work with each other and with their local governments to benefit.

Our fifth interview was with Prof. Madlene Minassian, a Professor of Public Health, and the Head of Corporate Affairs at PicsArt, Inc. Prof. Minassian, like Dr. Lylozian, provided her insight on key issues affecting Armenian citizens' health. She sees preventative care as being the biggest issue for Armenians; many people do not get yearly checkups, and only seek medical attention when necessary. She continued that many Armenians will not openly practice stresscoping mechanisms like meditation, leaving many people without an outlet. This is especially true for women, another focal point of our interview. Poverty affects women's health in different ways since they are generally the caregivers of their family and community. Some women will often forgo medical treatments, won't practice stress-relief, and will even reduce their meal size in order to provide more time and care to others. Some individuals see women's self-care as selfish which is a cultural norm that this library can't change. However, the solutions library has resources to assist women and all people who are impoverished through situations such as domestic violence. In addition to all of this information, Prof. Minassian gave us the names of NGOs that help with increasing healthcare access to specific impoverished groups like women or those in the LGBTQ community. These were made available in the solutions library.

Our sixth interview was with Ms. Ani Manukyan, a Program Manager for the Democracy, Health, and Social Reforms Office at USAID. Ms. Manukyan discussed a variety of topics with us including child labor and housing. Most of our discussion focused on the availability of social workers to help families individually. She pointed out that for many families, a solutions library would be great, but just as many families need support from exterior sources, like social workers. Even as a printed form, some families just don't have the means to acquire the materials necessary to implement some solutions. She explained that more support and information from social workers are needed to help these families on an individualized basis. She also mentioned that support packages for families are often given out in monetary form, but families aren't informed, or simply don't have regular access to phones or email to see when they receive these packages or are made eligible. However, more work is needed from community social workers to cover the impoverished communities of Armenia. Ms. Manukyan's insight helped us understand that even solutions not attainable for a family are important to list, as they may be attainable for a community or with intervention from social workers and NGOs.

Our seventh interview was with Mr. Norayr Benohanian, an Adjunct Lecturer and the Energy Efficiency and Renewable Energy Projects Coordinator at the AUA Acopian Center for the Environment. Mr. Benohanian provided his insights on issues such as housing and utilities. He also informed us of the use of ecotourism as a way to decrease poverty in small villages, using the village of Kalavan as an example of its success. He explained that access to electricity isn't much of an issue for most families; access to gas for heating, on the other hand, may be more difficult. Many villages do not have gas lines to them, and oftentimes, the fluctuations in gas prices cause people to use wood or other means of creating heat. He confirmed our earlier research, stating that firewood is a popular form of heating, and gave us some tips for improving the efficiency of burning firewood. Mr. Benohanian elaborated that in the wintertime, many families will incur debt trying to pay off their bills and expenses. He explained that work from NGOs and communities would be most beneficial; projects like building new homes, providing materials for insulation or energy efficiency in general, and fixing people's windows and doorways could go a long way. We have provided links to organizations that work in Armenia on these types of projects such as Habitat for Humanity and the United Nations Development Programme.

Overall, the website was the combination of these four main sections: the solutions library, training videos, information about the Poverty Stoplight application & how to use it, and finally printable materials. (Figure 7, Figure 8). The use of WordPress and the Divi plugin will ensure that any individual can edit the website since it requires no computer language skills. The printable materials we included were developed using the same information that is on the website, or as supplemental information or activities to help people put that information to use. Examples of some materials include fillable worksheets, foldable brochures, and flyers (Figure 9). The website is designed with a simple layout to ensure ease of use and compatibility of formatting between English and Armenian translations.

#### Poverty in Armenia

Solutions Library	Printables Poverty Stoplight Survey - Contact Us		
Education	5		
Finances	Welcome!		
Government	•		
Health	This website is a compilation of information and resources for overcoming issues		
Housing	<ul> <li>associated with poverty in Armenia. This library is a collaboration between the American University of Armenia, Fundación Paraguaya, World Vision Armenia, and Worcester Polytechnic Institute. We provide information related to finances,</li> </ul>		
Utilities	government, utilities, health, housing, and education. We also include print-ready pamphlets and worksheets for distribution during fieldwork and people who don't have access to the internet. We would love more feedback and ideas; please fill out the contact form at the bottom of the page!		
	Solutions Library		
	Utilities Government Housing Health		
	Finances Education		
	Printables We have created printable resources and pamphlets for visitors who do not have reliable internet access		
	Poverty Stoplight Survey           This website provides access to a demo version of the Poverty           Stoplight survey for Armenia. It contains 55 indicators that break           down poverty into the family's individual experiences of poverty. In           this way, it helps families create and prioritize smaller goals that lead           them to breaking out of the cycle of poverty. Feel free to take the           survey and see if it can help you!		
	Contact Us		
	Name *		
	First Last Email *		
	Subject *		
	Message *		
	SUBMIT		

Figure 7: Website landing page in English displaying solutions library drop down menu.

#### **Poverty in Armenia**

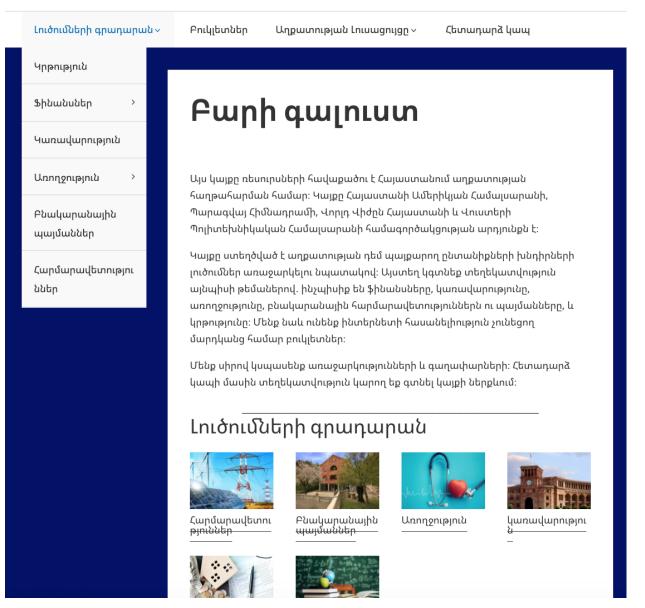


Figure 8: Website landing page in Armenian.

#### Cataloguing Resources for Poverty Reduction in Armenia - Page 39

## Printables

Here are all of our printable worksheets and information. Click on the links to open!

Education

Finances

**Example Resumes** 

Monthly Budget

Yearly Budget

**Goal Sheet** 

Debt

Government

**Personal Identification** 

Health

**Balanced Plate** 

Healthy Eating in Armenian - teensLIVE.am

Smoking – teensLIVE.am

How to Reduce Stress After Vaccinations – armvaccine.am

Reducing Weight Problems Among Young Adults teensLIVE.am 5 Steps to Avoid Food Poisoning – teensLIVE.am Community Involvement Nutrition Vaccines **Goal Sheets Exercise Cards** Water Sewing A Face Mask Instructions Housing **Community Involvement Energy Efficiency** Renting Wood Burning Efficiency Wood Stove Design Utilities **Energy Efficiency** Wood Burning Efficiency Wood Burning Efficiency Wood Stove Design

Figure 9: Printable materials on the website.

## **Recommendations & Conclusion**

The Poverty Stoplight Survey offers a new and innovative way to understand and address poverty. Unlike most poverty prevention programs and tools, Poverty Stoplight places the responsibility of fixing poverty on the people who are in it. By providing them with the knowledge of their situations, and ideas on how to fix it, people are empowered to break their cycles of poverty and can even serve as models for those around them. As a result of the survey's multidimensionality and focus on empowering the families who participate in it, Poverty Stoplight has succeeded in addressing poverty in multiple countries such as Paraguay and Argentina. Hopefully, future Armenian NGOs and poverty reduction programs will also make use of the tool.

We recognize that survey results alone are not going to change the lives of those who are in poverty or help them break the cycle of poverty. The solutions library is a valuable resource for social workers and Armenian families alike after taking the survey and making a life map, but it is not a cure-all. It is a starting point and guide for families who may not know how to approach the situation or problem that is keeping them in poverty. It also serves as a resource for social workers to reference if they are unsure of how to help a family.

Our solutions library was designed to provide the most effective and relevant information possible and has been designed for future teams to edit with ease. As more people work on the project, and technology improves, new solutions can be added to help Armenians in poverty. We recommend expanding and continuing to fine-tune the intricacies of the solutions library by first assisting social workers in collecting field data. The location of this trial data collection would need to be determined by the project sponsor. For example, WVA has established connections with families in Aparan who are familiar with the NGO's social workers and the overall mission of reducing poverty. As a result of data collection, high-priority, high-impact needs can be identified with quantitative statistics as well as first-hand accounts and interviews. This would lead to improvements in the accuracy and relevance of information on the website.

Completed Poverty Stoplight surveys from families would enable enhancements to the solutions library resulting in information that is more credible and relevant. As previously mentioned, time constraints prevented us from going in-depth on certain topics because we relied heavily on recommendations from the interviewed professionals. Not all topics on the website

were addressed through interviews but through individual research. Continuation of such interviews coupled with field data from the Poverty Stoplight survey will yield an increasingly accurate bank of solutions.

Last year's sponsor, Orran, is currently using an adapted version of the survey incorporated into their existing intake forms. A future team should determine which indicators they added or excluded due to their involvement with Poverty Stoplight, and which indicators they previously covered in their survey. This would lead to an assessment of the differences between the original Poverty Stoplight survey and their adapted version, to determine the effectiveness of their version. Compiling this data could help tailor the solutions library and give feedback on future iterations of the Armenian Poverty Stoplight survey. By talking to a representative from Orran who is familiar with the survey, it would be helpful to understand their reasoning behind adapting the original version.

Additional dissemination of the website is needed in order for it to be viewed and thus useful to all intended parties. The promotion of the website could lead to new connections with other organizations that can provide more ideas and insights for the solutions library. This would boost the website's visibility and the traffic it receives making it more widely used. We recommend communicating with NGOs in Armenia with whom we have already established contacts to determine the most effective mode of distribution of the website. Targeted research on effective promotion of a website is essential so as not to waste time and resources on inefficient advertisement attempts.

The interviews we performed shed light on many subjects that would have been difficult to address through individual research. With a language barrier and a lot of recent changes to the governmental structure of Armenia, up-to-date, and accurate internet resources in both English and Armenian were difficult to find. Interviews with local professionals gave direct and specific answers to questions about Armenia and its citizens. The interviews also gave us more insight into the different problems around Armenia that are indirectly related to poverty. Consequently, from many of the interviews, we were able to produce recommendations for future IQP projects.

Our interview with Prof. Harutyun Alpetyan and subsequent research indicated that lack of proper trash disposal can lead to unsanitary and unsafe conditions for families. For this reason, education and more effective waste management practices have the potential to help families alleviate other effects of poverty in their lives such as health and sanitation issues. We recommend a future project addressing waste management in Armenia, in cooperation with an NGO such as Eco Aghb and the AUA Acopian Center for the Environment, for example. This project could address the lack of information that Armenians receive about waste separation, composting, how recycling is handled in Armenia, and better alternatives to the current solution of burning trash and using illegal dumpsites. This would be one step towards preventing degradation of the health of the environment and consequently humans who live near hazardous dumpsites.

Prof. Yevgenya Paturyan described the current political landscape of Armenia and suggested a project as well. The Poverty Stoplight survey includes indicators called "Voting and Civic Engagement" and "Influence in the Public Sector" which emphasize the importance of involvement in elections and local/state government in order to realize one's voice in society. A project that focuses on educating Armenian citizens about what civic engagement is and what mechanisms are available to interact with the government would be very beneficial at this time. We recommend that resources like videos or pamphlets in Armenian be created in collaboration with, for example, a professional in the local Armenian government, to make education and information about these topics more accessible. It is crucial that a family understands that they can play a role in making decisions that will affect their own lives. In this way, they can actively engage in and support programs aimed at poverty alleviation, such as housing or food initiatives.

The significance of knowing one's legal rights was reinforced through our interview with Hasmik Jinanyan and from several indicators in the Poverty Stoplight survey. "Knowledge and Skills to Generate Income", "Awareness of Human Rights", and "Entrepreneurship" are indicators in which a family would score lower if they are not aware of their working rights. We recommend that a project focuses on breaking down information and regulations on worker's rights in Armenia into a format easily understandable for the average Armenian worker, for example in a video of FAQ booklet. This project could take multiple avenues, including connecting with the Republic of Armenia Ministry of Labor and Social Affairs. If a worker does not know what he is and isn't entitled to, he/she could easily be exploited by not receiving pay or working longer hours for example, which negatively affects a family's financial situation. In this way, a project aimed at clarifying any confusing or hard to find information would be helpful for impoverished Armenians.

With more than a quarter of the population living in poverty, the health, and wellness of many Armenian people still suffer today. Poverty, as it has been mentioned before, doesn't just rear its head as a lack of income or assets. For some households, it could mean a day without food or even a winter without socks. In reality, poverty is so much more complex and so much worse than simply not having the funds to acquire everything one needs to survive. Some will argue that money can buy clothes, food, and even a new house located closer to the capital. But does that solve the issue? What happens when everyone living outside Yerevan decides to live in the city or right outside it?

Addressing poverty begins with creating preventative measures to ensure it doesn't grow; curative solutions usually only help people in that particular moment. This is where resources such as the solutions library and the Poverty Stoplight program come in. This program addresses poverty by breaking it down into manageable categories, and by revealing the many manifestations poverty can take. Our solutions library builds off of this and provides resources and guides that are highly specific to particular dimensions of poverty. In addition to this, Poverty Stoplight claims that individuals who are empowered to break the cycle of poverty are less likely to relapse back into it. Intervention from the government and NGOs will only work when individuals that are suffering work with these organizations and pull themselves out of poverty. The solutions library also addresses this as most of the resources and guides are tailored towards individuals and families.

It's also important to recognize that poverty doesn't just stop at the borders of a single country. The poverty of one nation can affect its neighbors and even the world. As mentioned before, the global economy exists only because of the nations that make it up. When poverty is reduced, living conditions improve, lifespans increase, production rates rise, and nations are able to give back to those around them. This same principle applies to a family, and even an individual.

It can be incredibly hard to see how people thousands of miles away from each other are connected, but the people of Armenia are just like everyone else. They have culture and traditions, times of peace and war, and some amazing food. While everyone may not be in poverty, we are citizens of places that likely have poverty in them. Poverty in the world comes from the poverty of every nation. Every nation's poverty comes from the hardships that its people suffer from. Armenia's poverty, just like every other nation in the world, is directly related to its people; even our country and its poverty is related to others around us, maybe even Armenia. This project exemplifies why it's better to be the change and not the problem. If we perform a service to those around us, together we can all break the cycle of poverty.

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