

ALX Foundations: Milestone 3 Worksheet

Instructions: Provide responses to all items in the orange boxes. The worksheet consists of Sections A-E. Work on this worksheet one section at a time throughout your week, and return to Savanna after each section for the next set of content and further instructions.

SECTION A: Problem Statement

Step 1: Your GCGO

Which Grand Challenge or Great Opportunity (GCGO) do you want to play a part in addressing? (Pick one.)

As a reminder, the GCGOs are:

- Urbanization
- Education
- Infrastructure
- Healthcare
- Climate change
- Governance
- Job creation
- Agriculture
- Natural resources
- Arts, culture, and design
- Tourism
- Empowerment of women
- Regional integration
- Wildlife conservation

GCGO: Job creation

Step 2: Describe Your Problem

You are going to take a first pass at briefly describing your chosen problem. This can be any problem that speaks to you, as long as it is a real-life occurrence that is clearly linked to your chosen GCGO, that occurs in a certain place and for certain people (and/or animals), and that it can be clearly defined.

For example, if you chose wildlife conservation as your GCGO, you might first state your chosen problem as:

There are very few white rhinos left in Kenya and they are in danger of going extinct.

Another example, if you choose infrastructure as your GCGO:

Residents of major cities in South Africa endure prolonged periods without electricity, significantly hampering their ability to generate income.

Note that this is just your first attempt stating the problem, and you don't need to quantify the problem yet. In order to get to your official problem statement (which does need to be quantifiable) first answer the following questions. The more specific your answers, the better. You may also ask Google, Wikipedia, , ChatGPT, and/or other reliable online sources to help you. Please be sure to cite (give credit to) any sources that you use.

Describe your problem using What/Who/When/Where/Why/How....

1. **What** is the problem? What is reality like because of this problem? What will reality be like if the problem continues?

The problem with job creation is that there are often insufficient opportunities available, leading to unemployment and underemployment. As a result, many individuals struggle to secure stable income and support themselves and their families. If this problem continues, the reality will be, continued economic hardship for many people, widening income inequality, and slower overall economic growth.(google)

2. **Who** does this problem impact, directly and indirectly? Who contributes to the problem?

The problem impacts individuals directly, particularly those who are unemployed or underemployed, as well as their families who depend on them for financial support. Indirectly, it affects society as a whole by influencing overall economic prosperity and stability. Those

who contributed to the problem include factors such as economic downturns, technological advancements leading to job displacements, and inadequate government policies or support for job creation initiatives.(chatgpt)

3. **When** did this problem begin? When does it occur?

The issue has been a concern for societies throughout history, as economic conditions and technology advancement continually shape the availability and nature of employment opportunities. It occurs globally, in both developing and developed countries.

4. **Where** is this problem occurring? What is the context in which it occurs?

The problem occurs in diverse settings, from bustling urban centers to remote rural communities. It manifests within various contexts, such as rapidly evolving industries, regions facing economic downturns, and marginalized communities lacking access to opportunities.

5. **Why** is this a problem? What are the pain points or gaps? Why do you personally care about this problem?

Job creation is a problem because it directly impacts people's ability to earn a livelihood and support themselves and their families. The pain points or gaps include high unemployment rates, especially among vulnerable populations and a mismatch between available jobs and the skill of the workforce. Personally, I care about this problem because I believe that everyone deserves the opportunity to work and thrive, and addressing unemployment is essential for creating a more equitable society.

6. **How** would reality be different if this problem were solved? (This can be your opinion.)

If the problem is solved. We would see a significant positive impact on society. There would be lower unemployment rates, higher levels of economic stability, and increased prosperity for individuals and communities. People would have more opportunities to pursue fulfilling career and contribute to the overall growth and well-being of society

Step 3: Understand and Quantify Your Problem

Next, you will conduct some basic web research to better understand, define, and quantify your problem. You will do this through a combination of Google search, Wikipedia, credible web sources, ChatGPT or other AI research tool, and your own synthesis of information from these sources. Be sure to give credit to your sources, and paraphrase (use your own words) rather than quoting directly.

7. What is the historical context for this problem? What happened in the past that contributes to the problem now?

Job creation is complex and influenced by various factors such as economic cycles, technological advancement and societal changes. Past events such as industrial revolutions, global recession, and shifts in labor markets have all played a role in shaping the current landscape of employment. Historical inequalities and systemic barriers have contributed to disparities in access to job opportunities, particularly for marginalized groups.(WIKIPEDIA)

8. What are the possible economic (money-related) reasons why this problem exists and continues?

Economic downturns: during periods of economic instability, businesses may cut back on hiring or even lay off workers to reduce costs, leading to higher unemployment rates.

Technological advancements: automation and technological innovation can lead to job displacement in certain industries, as machines and computers replace human labor.

9. What are the possible political reasons why this problem exists and continues?

Some political reasons include: policy uncertainty such as political instability and inconsistent policy making can create uncertainties for businesses, discouraging investment and hiring.

Also cronyism and corruption such as political favoritism, nepotism and corruption can distort market and allocate resources inefficiently , undermining competition and hindering job creation

10. What cultural beliefs and/or social norms possibly contribute to this problem?

Resistance to change : cultural attitudes towards risk-taking, innovation and entrepreneurship may discourage individuals from pursuing new business ventures or adapting to changing economic conditions, inhibiting job creation and economic growth. Hierarchical and social structures may also contribute to this problem since societies with rigid hierarchies may impede social mobility and limit access to education, employment and advancement.

11. Who are the people potentially responsible (directly or indirectly) for creating and/or maintaining this problem?

Economic policymakers: central banks, monetary authorities and economic advisors influence economic conditions through monetary and fiscal policies, which can have implications for job creation and unemployment rates.(CHATGPT)

Now that you have the preliminary information you need, you'll continue your web research to find some numbers, or quantifiable information, to help describe your problem:

What numerical data can you find that is relevant to your problem? Be sure to use your own words and also cite (give credit to) your sources.

Example 1:

According to Chat GPT, there are about 880 white rhinos currently living in Kenya. This population is very small, and they are critically endangered.

Example 2:

Johannesburg has approximately 5.8 million residents (per ChatGPT) and had approximately 4.7 million international overnight visitors in 2019 (according to the South African Tourism Annual Report for 2019/2020).

12. Approximately how many people (and/or animals) are **directly** impacted by this problem? Explain.

According to Statista, the number of unemployed people who are impacted directly by job creation problems globally is around 205.25million. This directly affects their ability to support themselves and their families.

13. Approximately how many people (and/or animals) are **indirectly** impacted by this problem? Explain.

According to CHATGPT, approximately billions of people are directly impacted by job creation problems worldwide. This includes family members and dependents of those who are directly affected by unemployment or underemployment as well as broader societal repercussions such as reduced consumer spending, strain on social welfare systems and increased social tension.

14. What other numerical data can you share that is relevant to your problem? What can you find out about its size and scope? What can be measured? (For example, the amount of trash produced in Nairobi each day, the number of people without access to clean water, etc.)

According to the African Union, job growth rate measures the rate of change in the number of available jobs over a specific period, typically expressed as percentage. It reflects the pace of job creation or loss within an economy or industry.

Step 4: Describe Your Solved State

Without having to come up with *how* to solve the problem, describe what the desired, solved state looks like. Please use numbers wherever possible, and make your solved state specific and measurable.

Example 1:

There would be a population of 10,000 healthy and protected white rhinos living in the wild in Kenya.

Example 2:

All 5.8 million residents of Johannesburg would have affordable and consistently available power from clean energy sources, 99.5% of the time.

15. If the problem were addressed/solved, what would reality be like?

There would be a decrease in the employment rate, the unemployment rate would decline, indicating a higher proportion of the labor force being employed. I.e employment rate may decrease from 7% to 3%, representing a significant improvement in opportunities. Also positive job growth rate may rise from 2% to 4% annually reflecting robust job creation efforts.

16. Are there other benefits that would come from your problem being solved? Name at least one.

There will be potential reduction in income inequality. When more people have access to stable and well-paying employment opportunities, it can help narrow the gap between the wealthy and less affluent

Step 5: Clarify Your Problem Scope

You are more effective at solving a problem when you know where its limits are. That is, when you know what is “in scope” and “out of scope.” For this reason, it is important to list what is out of scope, or NOT included as part of your problem definition.

Example 1:

The scope of the problem does not cover any other animal species besides white rhinos. It does not include white rhinos outside of Kenya.

Example 2:

The scope of the problem does not include any businesses or people outside of the legally-defined Johannesburg city limits. It does not apply to tourists or visitors staying for less than 1 year in Johannesburg.

17. What is NOT in scope for your problem?

The scope of the problem does not include specific job roles or description. While job creation impacts the availability and types of job within an economy, the detailed descriptions of individual job roles or occupations are not within the scope of our discussion.

Step 6: Areas for Learning

What do you not know or understand that you would like to know more about? This can be anything related directly or indirectly to your problem. Let your curiosity run wild!

Example 1:

I'd like to know where most of the demand for rhino horn is coming from. I'd like to know who are the primary buyers and who is behind the trafficking of rhino horn. I'd like to know how long the average rhino's lifespan is. I'd like to know how many babies a typical female rhino has, and how many babies typically survive into adulthood. I'd like to know more about what diseases impact rhinos. I'd like to know more about the kinds of habitats that rhinos thrive in. I'd like to understand what international organizations do the best job supporting wildlife conservation and what their practices are. I'd like to know what models of community involvement have been most successful in keeping wildlife safe and thriving. I'd like to understand how much land is available in Kenya for rhinos to roam.

Example 2:

I'd like to better understand the utility company Eskom and its history. I'd like to understand why Eskom has failed to plan properly to update its infrastructure. I'd like to understand the relationship between Eskom and the South African government. I'd like to know if there are private utility companies providing competition to Eskom. I'd like to know what the latest breakthroughs are in solar power. I'd like to know what other possible energy sources might be made available in Johannesburg. I'd like to know how much energy tourists and temporary visitors use. I'd like to better understand the process of how limited energy supply gets allocated to people and businesses. I'd like to better understand the economic impact to people and businesses of not having power.

18. What else would you like to know or understand better? (It can be anything related to your problem.) List 5-10 things.

I'd like to understand the impact of income inequality and poverty on job creation and economic growth.

I'd like to understand the impact of technological advancements, such as automation and artificial intelligence, on job availability and job types.

I'd like to understand strategies for fostering entrepreneurship and small business development to spur job growth and innovation.

I'd like to understand or know the relationship between globalization and job creation, including the effects of international trade agreements and outsourcing on employment opportunities.

I'd like to know the impact of demographic trends, such as population aging or migration patterns and labor markets and job opportunities.

I'd like to understand the relationship between innovation and job creation, including the role of research and development in fostering new industries and employment opportunities.

I'd like the potential for green or sustainable industries to create new job opportunities while addressing environmental challenges.

I'd like to understand the role of government policies and regulations in promoting or hindering job creation, especially in different industries sectors.

Step 7: Problem Statement

This step is the culmination of all you have done in Part A. You will synthesize the work you have done above to create a problem statement of 150 - 250 words. This should be in narrative form, 2-4 paragraphs, and should NOT use bullet points.

Your problem statement should:

- Provide a succinct description of the problem **in the first sentence**.
- Indicate specific population affected
- Explain the impact (cost, time, environmental, personal) and why the problem matters.
- Explain what reality would look like if the problem were solved. The gap that exists between present reality and the desired outcome should be clear.

Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting and instead paraphrase (use your own words), as modeled in the example. Also list your sources and their urls (web addresses) at the end.

Example :

Kenya's white rhinos are in critical danger of extinction. There are currently about 880 white rhinos in the country of Kenya, per Wikipedia. According to Chat GPT, Rhinos are considered a keystone species, meaning they have a disproportionately large impact on their ecosystem compared to their population size. Rhinos help shape their environment by influencing vegetation growth and acting as seed dispersers, which creates habitat for other species (per ChatGPT).

The extinction of white rhinos would have cascading effects on other plant and animal species in their habitat. According to the Kenya Wildlife Service, rhinos' presence in reserves and parks bring millions of tourists each year, contributing to local economies and supporting conservation efforts. Once a species goes extinct, it is gone forever. The extinction of rhinos would represent the loss of millions of years of evolutionary history, and unique genetic diversity that science has yet to fully understand and benefit from (per ChatGPT).

My problem would be considered solved when the population of wild, white rhinos in Kenya reaches 10,000, and when all imminent threats to their population including poaching and habitat destruction are not present. If this were the reality, it would create ecosystem balance, create large revenues from ecotourism, preserve important cultural symbols, and allow for genetic diversity that could benefit humanity in ways we may not yet fully understand.

Sources:

Kenya Wildlife Services Annual Report 2017, <https://www.kws.go.ke/content/annual-reports>

ChatGPT, <https://chat.openai.com/>

"White Rhinoceros", Wikipedia, https://en.wikipedia.org/wiki/White_rhinoceros

19. My problem is statement is:

The challenge of achieving adequate job creation persists driven by dynamic factors such as technological evolutions, economic instability and governmental regulations. The problem impacts various segments of population including recent graduates, low-skilled workers and individuals transforming between careers. Youth unemployment rates are several times higher than adult rates and particularly high in cities and among females.(per ChatGPT and UNDP)

Job creation carries significant costs, both economically and socially. Economically (cost), it leads to reduced productivity and economic growth, as unemployed individuals contribute less to the economy and may require government assistance. In terms of time, the longer the individual remains unemployed the more difficult it becomes for them to re-enter the workforce, leading to long-term consequences for their earning potential and overall well-being.

From an environmental perspective, job creation challenges can impact sustainability efforts, as economic downturns may lead to a decrease in funding for environmental initiatives and focus on a short- term economic recovery over long-term environmental goals.

On a personal level, the job creation problem can cause stress, anxiety and loss of self-esteem for those struggling to find employment.(per ILO and chatgpt)

If this problem is effectively solved, we would see a reality where employment opportunities are abundant, leading to full employment and reduced unemployment rates. This would result in higher economic productivity, higher incomes for individuals, and improved standards of living. The current reality shows a significant gap between this ideal scenario and the present situation. Unemployment remains a persistent issue in many regions with disparities in access to employment opportunities based on factors such as geographical location.

20. Please list all sources that you used to form your problem statement:

Sources:

CHATGPT

UNITED NATIONS DEVELOPMENT PROGRAM

<https://www.undp.org> pdf

INTERNAL LABOUR ORGANISATION

<https://www.ilo.org>



Please go back to Savanna and continue with your learning content. You will be filling out Step 8 after you've completed the Peer Activity.

Step 8: Peer Activity Report

This step is related to your peer activity and should help you to improve your problem statement. Answer the following questions as part of the activity and then update your Problem Statement in Step 7 above, based on your feedback.

21. Who reviewed your problem statement? (Give the first and last names of your 2 peers).

1. Johnmark Ezvaldo
2. Kelvin Ziro

22. In brief, what feedback did they give to you?

They gave me positive feedback. They said my work was stunning and that I demonstrated a thorough understanding of the necessary elements of a good problem statement. They also asked me to cite and give credit on my work.

23. Was their feedback useful to you? Did it feel kind? Why or why not?

Their feed was kind and encouraging . It was not only helpful but also motivating.

24. Who did you give feedback to? (Give the first and last names of 2 peers- they may be the same or different peers from above.)

1. Johnmark Ezvaldo
2. Kelvin Ziro

25. Do you feel that you gave useful and kind feedback to your peers? Why or why not?

I believe I offered both useful and kind feedback to my peers. I aimed to be constructive and supportive in my comments, helping them while also being encouraging.



Please go back to Savanna and continue with your learning content. You will be prompted on when to return to complete Section B.

SECTION B: Research Questions & Hypothesis

IMPORTANT: Complete this section AFTER completing the Savanna Modules *Asking Effective Questions* and *Web Research*.

Step 9: Research Questions

Based on what you have learned so far and on 'Step 6: Areas for Learning' from this worksheet, come up with 3 research questions. **Research questions should be complex enough that they can't be answered by a single Google search.** If appropriate, form a hypothesis that your research may confirm or reject. (As a reminder, a hypothesis is a prediction of how you think your research will answer your research question. It is your best guess. If you truly have absolutely no idea, state "not applicable.")

Example Research Question #1:

What are some ways can we increase rhino populations?

Hypothesis:

Rhino populations will be increased by creating more open spaces for them to roam, increasing their protection, increasing international interest in them, and other reasons I have yet to uncover.

Example Research Question #2:

Which organizations have been effective at wildlife conservation and what practices do they use?

Hypothesis:

Not applicable; I don't know.

Example Research Question #3:

How many babies can a typical female white rhino have in her lifetime, and what are the reasons a female may not have high fertility?

Hypothesis:

A typical female white rhino can have 5 babies in her lifetime, and fertility may be affected by diet, amount of grazing territory, poaching, stress, mate availability, and other reasons I have yet to uncover.

26. Research question #1:

How does the presence of small businesses influence employment opportunities ?

Hypothesis (if applicable): *communities with a higher density of small businesses will exhibit lower unemployment rates and higher job creation rates.*

27. Research question #2:

What impact do government policies have on job creation?

Hypothesis (if applicable): government policies aimed at providing tax incentives for businesses will lead to increased job creation.

28. Research question #3:

What role does education and skills training play in fostering employment opportunities?

Hypothesis (if applicable): increased investment in education and skills training programs will result in higher employment rates and greater economic mobility for individuals



Please go back to Savanna and continue with your learning content. You will be prompted on when to return to complete Section C.

SECTION C: Web Research

Part 1: Research Plan

You can plan out your research, for each of your research questions, using the template below.

29. Step # 1: Define your objectives, 3 research questions & associated hypotheses.

Key Questions: What are you trying to accomplish with this research? What do you wish to find out that will accelerate your work in the right direction?

Your Response:

My objective is to identify factors that contribute to job creation, explore strategies for increasing employment opportunities and also to analyze the impact of government policies and growth. I'm aiming to contribute valuable insights to the field of economic development and employment policy. By conducting this research, I hope to uncover actionable findings that will inform decision-makers and stakeholders about the most effective approaches to promoting job growth. My aim is to accelerate progress towards creating more opportunities for employment and fostering economic prosperity.

the three questions are:

1. what are the main drivers of job creation
2. How do government policy impact the employment rate.
3. What role do businesses play in job growth?

30. Step # 2: Determine your end outputs.

Key Questions: What type of data/information is ideal for you to find, based on what you are trying to accomplish? Do you need to present it in any particular format?

Your Response:

The ideal type of data and information would depend on the specific objectives and research questions i have defined. one of the data i will gather include: employment statistics- this could include data on job growth rates, unemployment rates, labor force participation rates, and industry- specific employment trends. i'll also look for data on economic factors that influence job creation, such as GDP growth, investment levels, consumer spending, and business confidence. Thirdly, i'll collect information on government initiatives aimed at promoting job creation such as tax incentives, subsidies, training programs, and infrastructure. For the format, I will present my data in a clear and understandable manner i.e written summaries.

31. Step # 3: Scope your main sources of information.

Key Questions: Do you already know where you might want to go to find the information you're seeking? Are there particular entities or organizations that you know are seen as "experts" on the topic?

Your Response:

Yes , i will explore government websites and reports from agencies like the Bureau of labor statistics or department of labor as they often provide comprehensive data on employment trends and policies.professional organizations like international Labor organization (ILO) or the National Association for business economics (NABE) may also have resources and publications relevant for my research



After you updated earlier parts of the worksheet based on your research plan, please go back to Savanna and continue with your learning content. Return to Part 2 and Part 3 prior to submitting your milestone.

Part 2: Conducting Research

You can answer the following questions as you complete conducting your research into your research questions.

32. Step 1: Begin gathering your required information.

Key Questions: What search terms should you use? How many reports/articles do you want to read before deciding you have seen enough?

Your Response:

I will use search terms like:

Job creation strategy

Employment trends

Economic development and employment

Government policy for job growth

Impact of small businesses on job creation.

As for the number of reports or articles I should read, I don't think I have any. I'm focusing on the relevance and quality of the information, and if I feel confident enough that I have gathered enough data to address my research then I'll stop.

33. Step 2: Evaluate the Validity/Credibility of Your Sources and Information

Key Questions: Are the sources credible and reliable? Consider the authority, accuracy, objectivity, and currency of the information to ensure its validity for your research.

Your Response:

Yes, the sources are very credible and reliable.

Accuracy: I assess the accuracy of the information by cross-referencing it with other credible sources and verifying the facts, data, and statistics presented.

Objectivity: I consider the objectivity of the information and whether there is any bias or agenda that may influence the presentation of the data or arguments.

Authority: I determine the expertise and qualification of the author responsible for the information.

Currency: I evaluate the currency of the information to ensure that it is up-to-date and relevant to your research.

34. Step 3: Synthesize and Communicate Your Key Findings.

Key Questions: Summarize the key information and findings that you have gathered during your research. Organize these findings in a clear and coherent manner, ensuring that they directly address your research objectives and questions.

Your Response:

I gathered several pieces of information during my research, these include; the impact of government policies on employment, the role of small businesses in job creation growth, and importance of education and skills training.

Government initiatives such as tax incentives and infrastructure projects were found to stimulate employment, while small businesses were identified as significant contributors to job creation.

Investment in education and skills development were highlighted as essential for fostering long-term employment opportunities.

35. Return to Your Original Objectives and Key Questions.

Key Questions: Revisit your initial objectives and key questions to ensure that your research findings adequately address them. Reflect on whether your findings have effectively contributed to solving the identified problem.

Your Response:

My research has addressed the key questions and objectives outlined. I have identified factors such as government policies, small businesses and education and skills training as a significant contributor to job creation, i have also explored strategies such as tax incentives and investments in education that can stimulate employment growth. My research has provided valuable insights into effective approaches for promoting job creation and have contributed to addressing the identified problem.

Part 3: Research Summary

In 200-300 words, provide an executive summary of your research in the text box below. You should be synthesizing information from multiple sources. Provide answers and explanations for the 3 questions you investigated and your key research findings. This should be in a narrative format (no bullet points), and be at least 3 paragraphs long.

Please use at least 3 different online sources such as ChatGPT, organizational websites, Wikipedia, etc. Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting, paraphrase instead (use your own words), as modeled in the example. Also, list your sources and their URLs (web addresses) at the end.

36. Research Summary

My research explores three pivotal questions central to understanding and enhancing employment dynamics: the primary catalyst of job creation, the profound influence of government policies on employment rates, and the integral role business plays in fostering job growth.

The first question explores how government policy impacts the employment rate. Government policies on employment rate and labor vary depending on the specific policy and the country in question. Examples of how government policy affects employment include: **fiscal policy-**

where government can increase and demand for goods and services, which can lead to job creation. However, government borrowing to finance spending can lead to higher interest rates, which reduces investment and job creation. **Active labor policies**- job training programs can help unemployed people develop the skills they need to find jobs. Wage subsidies can make it more affordable for employers to hire new workers. Public employment schemes can provide temporary jobs for unemployed people.(ILO and quora)

The second question explores the main driver for job creation. These include: economic growth, entrepreneurship and innovation and globalization and trade. Jennifer Erikson, the director of Competitiveness and Economic Growth at the center of American progress testifies that her focus will be overview of the current job picture in united states, policies that promote job creation in the short to medium term and also what need to be done to ensure vibrant economic ecosystem.she concludes that the sooner they acknowledge that smart government policies that support a strong and growing middle class are key to the economic success, the sooner they will see more americans in well-paying, middle-class jobs. (CAP)

The last question explores the role small businesses in job growth.micro, small and medium-sized enterprises(MSMEs)have a potential impact on achieving many of the sustainable development goals much greater than the size.Entrepreneurship can be cure for Africa's problems such as unemployment, inequality, low productivity, disconnect from global value chain etc (devine and kiggundu, 2016.).additionally, businesses contribute to job growth by creating new positions, investing in workforce development and fostering entrepreneurship, which all contributes to a thriving job market

Sources:

CHATGPT

Centre of American progress

www.americanprogress.org

Springer open

Innovation-entrepreneurship.springeropen.com

<https://www.quora.com>

International labor organization

<https://www.ilo.org>

Once you have completed this worksheet, export/convert to .pdf, rename it per the instructions, and upload to Savanna as your Milestone # 3 Submission. Celebrate a job well done!

