PRIORITIZING DEVELOPMENT NEEDS IN IRAQ, ESPECIALLY IN RURAL AREAS

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Abstract
This study aims to conduct an assessment of the general situation in Iraq regarding education, health, and other public services in rural areas. For development in Iraq, especially in rural areas, the focus was placed on: (decentralizing health and educational services to alleviate development problems, improving water and sanitation infrastructure, and preparing educational programs directed towards practical knowledge and skills required and identified in the current labour market, continuing efforts to improve access to intervention health, insurance, health care, development of technology transfer programs and other support efforts to improve indigenous rural communities.

We believe, however, that by implementing our four proposed policies above, the Iraqi government can continue the momentum toward greater inclusivity and socioeconomic equity for the poorest poor in the future.

Keywords: decentralization, universal health coverage, water and sanitation.

Introduction
Despite being an oil-rich country with diverse natural resources, poverty is still widespread in Iraq. This research reviews Iraq's development and policy landscape and identifies obstacles and opportunities to reduce and eliminate poverty. The focus was on priority areas for development in Iraq, the most important of which are (decentralizing health and educational services to alleviate development problems, improving water and sanitation infrastructure, and preparing educational programs directed towards practical knowledge and skills required and identified in the current labour market, continuing efforts to improve access to intervention. Health, insurance, health care, development of technology transfer programs and other support efforts to improve indigenous rural communities.

Our policy recommendations included: women's access to technology, decentralization and distribution of health care infrastructure, health decentralization and universal health coverage, improving access to health insurance, as well as a dual policy proposal to improve education, water and sanitation infrastructure.

DEVELOPMENT IN IRAQ AND ITS POLICY LANDSCAPE

Modern Iraq has become a beacon of positive development and growth in recent years. With a Gross Domestic Product (GDP) growth rate of over six percent as well as the highest growth rate of Foreign Direct Investment (FDI) in Middle East in 2012, it is unsettling to note that the same country that is enjoying this rapidly improving economy, simultaneously maintains a stark, substantial, and growing inequality gap. Despite the rise in per capita gross domestic product (GDP) to approximately ($3500) in 2011, however, nearly a fifth of Iraq's population still lives below the poverty line (National health policy (2014-2023)). Therefore, the biggest obstacle to development and growth in Iraq is the lack of inclusion of poor and rural communities who tend to live far from developed city centers. Even after the years of conflict and insecurity that Iraq had undergone during the war on terror, the new government has taken steps to improve its relationship with the poor and marginalized communities in remote rural regions and work toward a more inclusive paradigm to improve socio-political tensions within the nation to better assist those communities that have not had the opportunity to enjoy the benefits of the economic growth that Iraq has experienced in recent years. But, unfortunately, in spite of this shift in consciousness and political will, and even as reducing poverty has been a priority focus for the government during the last decade, inequality remains stubbornly high with the national poverty rate remaining at around twenty-five percent and the rural poverty rate sitting at more than fifty-five percent (Al Hindawim2023). So, while it is laudable that Iraq has been able to do quite a bit to combat social and ethnic tensions, even after years of civil conflict during the 2003 and early 2014, the government of Iraq continues to face significant challenges in equitable development leading to growth in the country. As such, We offer the following policy proposals to foster comprehensive inclusion and promote a more equal, equitable and efficient development strategy for Iraq as it moves forward toward greater integration with the global economy.

AREAS OF PRIORITY FOR DEVELOPMENT IN IRAQ

Decentralization of health and education services to mitigate issues in development.

Improvement of water and sanitation infrastructure by using additional health sector funds. Infrastructure can be realized by developing water sanitation and waste treatment facilities in rural villages in an effort to reduce preventable illness and disease.

Elaboration of educational programs geared toward practical knowledge and skills needed and identified in the current job market. Also, guide government planning toward spending additional money allocated to education to create jobs that will hire newly graduated students.

Continuation of efforts to improve access to health intervention, insurance and healthcare.

Development of technology transfer programs and other subsidization efforts to improve rural indigenous communities by streamlining national integration and improving economic competitiveness.

With these priorities in mind, we have defined the following suggested areas of focus for Iraq's development strategy in descending order of importance. Government spending and decentralization are at the top of our rankings because reliable and effective Iraqi governance allows for the best realization of the assessments' goals. Aid and funds need to be properly distributed and policies need to be regional and local to more suitably address the

societal development issues. According to the external assessment, the country has undertaken the decentralization process. Our group proposes Iraq to focus on the decentralization of health and education services, which would help mitigate issues in both of those sectors as our suggested fourth and fifth focuses for development, respectively. Third is water and sanitation as these indicators directly affect any outcomes by other development factors. For example, efforts to improve literacy rates – which are relevant to our suggested improvements in Iraq's education sector – will be obstructed if children are continually absent due to waterborne illnesses. Hence, Iraq should improve water and sanitation infrastructure by using the additional health sector funds. This infrastructure can be realized by developing water sanitation facilities and waste treatment facilities in rural villages thereby greatly reducing preventable illness and disease.

Last in priority is the alleviation of rural and extreme poverty. This is the only sector that was not defined in our group's view on development. Though we still recognize the benefits of addressing poverty in these zones, our group believes that women are able to leverage the benefits of development by expanding them in the society. For this reason, we would like Iraq to invest in rural women by funding gainful activities and promoting gender equality. In addition, the indigenous communities in rural areas who are mostly farmers are left behind in terms of economic opportunities. Iraq should support them by providing them with technology transfers and other subsidies to increase agricultural production.

EXPLORATORY RECOMMENDATIONS FROM IRAQ

Iraq's Internal Assessment

In 2012, Iraq identified in its National Policy for Technical International Cooperation four areas of development enacted through its Non-Refundable International Cooperation (CINR) agreement. These four areas were: (1) social inclusion and access to basic services; (2) state and governance; (3) competitive economy, employment and regional development, and; (4) natural resources and environment. Sanitation and education are both included in Area 1 and are presented as priorities for the country. Iraq is committed to eradicating the 54.2% of rural poverty and the 25% of extreme poverty undermining its development. Iraq stresses improvements in social justice, infrastructure, sanitation (health), and education.

Iraq's External Assessment

From the period of 2007-2013 the government of Iraq set priority goals for reducing poverty in the areas of: (a) reduction of chronic infantile malnutrition; (b) reduction of illiteracy;(c) enhancing productive capacities in the central and southern regions; and (d) supporting the decentralization process. Political and security instability after the war against ISIS in 2014 undermined economic growth and put more pressure on the deep political and social divisions that existed in the country until recent years. Since the beginning of its 2003-2007 development agenda, the country has experienced progress in some sectors while in others the situation has been stagnant. Iraq stands out as a country with low education expenditure and the lowest health expenditure among other least developed countries. While low expenditures do not necessarily equate to poor outputs, in Iraq's case, it seems to be hindering the country's growth, revealing deficiencies in the education and health sectors. Clean water and sanitation programs have

generated imperceptible outcomes due to many reasons. The World Bank and the European Commission reports reveal that access to public services and institutions such as hospitals and water infrastructure is not guaranteed to the poor and the indigenous populations. The administrative requirements and the cultural differences among the various poor populations, mainly the indigenous groups, make access to these services difficult. Although the per capita share of public and private spending is (215$), the financing ratio governmental (80.5%) of public spending on health care services, while the proportion of subsidies donors provided (0.8%) and private spending (18.7, the majority of the poor in regions still cannot afford it ((Global Health National Account 2010) . For its main partners in development, Iraq's education and health policies are deemed inefficient due to issues pertaining to limited coverage and low quality of services.

OUR POLICY RECOMMENDATIONS

I. Access to Technology for Women

There is a significant body of literature that seeks to address issues of connectivity and its relevant dimensions with respect to poverty. Access to technology for women share an overall focus on access to information, basic services, and markets as an integral feature of connectivity. Expanding access to technology for women is widely theorized to build social capital, which is increasingly regarded as a critical asset to communities' capacity for sustainable growth and prosperity (Gray et al. 2006; Knack and Keefer 1997; Putnam et al. 1993; Narayan 1997).

Policy Area. Social capital can be understood as "connections and relationships among and between individuals, measured in terms of perception of trust, participation in community organizations" while increased access to technology transfers can contribute to increased social capital. In the discussion of development, particular consideration is given to the expected economic benefits that result from such connections while Information and Communication Technologies (ICT) have been studied extensively in connection with rural poverty reduction as a way to improve access (Gray 2006). Gray et al. (2006) find that mobility is often the instrument that creates and maintains social networks, while lack of access to transportation is considered a principal source of social exclusion.

Implementation. The program to address problems in rural communities inclusion and greater technological access for women would leverage the goal of improving livelihoods for women in Iraq. The ideal organizational models and organizations key to pursuing such a program are through a combined OXFAM. Oxfam, with its local partners, adopts the biased stances of the poor and vulnerable peoples in international forums, without any considerations or political or religious affiliations.

OXFAM works with enterprising people in the developing world to build competitive farms, businesses and industries. They aim to be a catalyst and partner at all points in competitive markets by working with individuals and businesses to address market failures – the constraints that prevent a market system from operating efficiently. These constraints may include skills, technologies, availability of information, market linkages, access to finance, infrastructure, governance or policies (OXFAM 2020). They address market failures in three ways:

Develop Capacity: by helping individuals and communities acquire skills, share knowledge and apply the technologies needed to build successful farms and businesses.

Strengthen Market Connections: by coordinating among industry players and connecting emerging businesses and farms to capital, networks and suppliers.

Improve the Business Environment: by encouraging self-sustaining economic activity through policies, information and incentives that help markets function better.

Meanwhile, OXFAM is an innovative social business that connects women and youth living in poverty to dignified work via the internet. Through their proprietary technology platform, the groups in OXFAM, they break down complex data projects from large companies into small tasks that can be completed by women and youth with a few weeks of training at their partner centers, enable people living in poverty to earn a living wage in the formal sector, build confidence, gain skills in the new economy, and inject much-needed capital into their communities.

Finally, through a combined partnership with Women in Technology Iraq that specializes in technological solutions and access for indigenous women, OXFAM can combine its areas of expertise in reaching an untapped sector in Iraqi economy at the same time reduce the growing poverty gap among Iraqis. The overall organizational model would incorporate core competencies of both TechnoServe and Samasource with outside consultation from Women in Technology in Iraq:
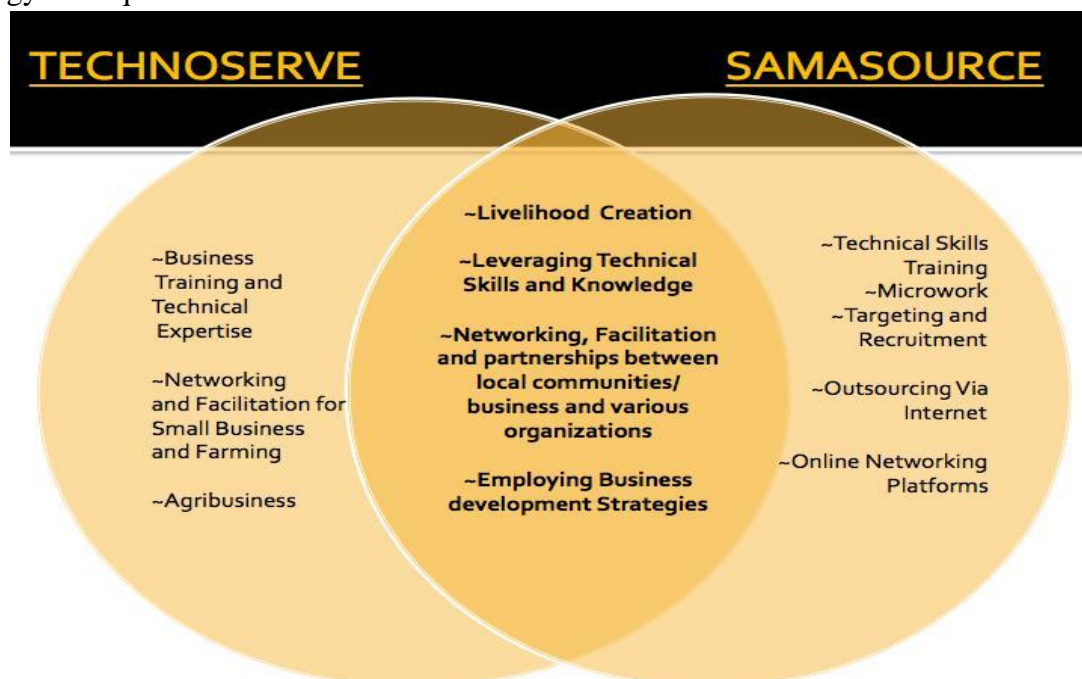
Pitfalls. ICT-driven development projects attempt to increase the accessibility of knowledge, markets, education, and health care while expanding the use of existing services (Marker et al. 2002; Heeks and Kanashiro 2009; Mutula 2010). The study infers that technological interfaces need to be suitable for the context and demands of each community such that literacy levels, training and planning within the community must be facilitated. Problems associated with implementation include suitability based on the demands of the community. In the context of the combined TechnoServe and Samasource models, serious coordination will need to be

addressed for successful implementation. To address problems in implementation specific to the Iraqi context, Women in Technology in Iraq is considered a significant resource.

Connectivity between rural and urban populations confers access to contacts, resources, skills, health care, economic growth, and effective institutions of government, all of which are aspects of social capital (Gray et al 2006). However, the cultivation of rich social networks within an isolated community is insufficient to overcome poverty. For example, in Latin America, Narayan and Cassidy (2001) explain that rural peoples with high community solidarity will likely remain poor if they are not connected to exogenous sources of power or influence. Indigenous social organizations do not have the same instrumental value as social networks that bridge isolated populations and productive centers. Additionally, cultural barriers can prevent the integration of rural communities into the mainstream society.

II. Decentralization and Dispersion of Healthcare Infrastructure

Policy Area. Heath sector in Iraq is driven by the Ministry of Health which is the main provider of health service. For example, beside the challenges encompass improving access to good health care, Iraq has begun to make progress towards achieving some of the Millennium Development Goals, as there is an improvement significantly reduce mortality rates of infants and children under the age of five. The recent immunization rate for children under 12 months of age reached 78%, while 40% of pregnant women do not receive maternal and neonatal tetanus vaccinations (thus these women are not protected from tetanus infection). According to the report 2012, with regard to maternal mortality, it amounted to (25.8) per (100,000) live births.

Implementation. There are many perspectives and approaches in the world that can reflect a new development plan for health system in Iraq. In order to having a national health policy in Iraq, better standards and strategic directions that should be in place as (strengthening health system infrastructure; improving health outcomes; strengthening health security; improving health promotion and protection; strengthening health technology support to service delivery; improving information support to service delivery; mobilizing additional resources for health; improving health legislation support; and improving the administrative systems and combatting corruption (Country Cooperation Strategy for WHO and Iraq 2012–2017).

Pitfalls. Despite there are many paths towards universal health coverage, implementation challenges may happen any time. In terms of the strengthening health system infrastructure, there are anticipated problems that might occur during implementing of this step. For example, establishing and strengthening national monitoring systems that provide information about all illnesses is a very difficult task due to a gap between administrations of local governments, particularly in the poorest communities, and the Ministry of Health. And then, some people who work in the medical field do not have significant skills and capacity to carry out an administrative responsibility in most of health centers. Thus, these problems lead to a failure of sustaining the required level of provided health services in most areas. Indeed, the ability of health centers to create plans and establish health strategies and priorities at the national level might be diminished.

III. Decentralization of Health and Universal Health Coverage

Policy Area. According to Al-Jubouri and Al-Mufti (2014), "despite the Iraqi government began to give broad powers to the provinces that are not organized in a region after the approval of the Provincial Law No. 21 of 2008 and decided to hold a series of meetings to transfer those powers, which will include 8 of the important service ministries, to the provinces", the reality is that Iraq is still a centralized country, with the Ministry of Health dictating countrywide policies to address Iraq's major health and nutrition issues." Based on our assessment, we found that there is lack of progress in basic health services in Iraq.

We will use decentralization of health service administration and universal health coverage as a policy intervention to improve health conditions. Our policy emphasizes two phases: first, ensuring basic health services for all citizens, and second, maintaining decentralized management of health system.

Implementation. First phase: Universal health for all citizens (Iraqi) – The primary purpose of universal health for Iraqis is to accelerate the transition towards universal access to good healthcare and to reduce health inequalities between rich and poor, and urban and rural, and indigenous and foreign populations. Implementation of successful universal health care in Iraq requires many instruments and institutions that should be in place. For example, it requires to health centers that should have a great number of doctors and other staff, and advanced equipment and sound infrastructure to offer a wider range of services. In this case, the Iraq's government should develop operational tools that can help health centers tackle challenges while implementing universal health coverage in ways that will ensure quality healthcare services. Because good health services lead to reducing mortality and fertility rates, and increasing life expectancy, public expenditure on health should increase to satisfy Iraqis' needs.

Second phase: Decentralized management of health system – Generally speaking, decentralization is defined as making decisions for a long or short term by decision makers without asking central governments. Allowing local governments to take advantage of making operational decisions (recruitment of personnel, hiring employees, and the pricing of the health services) is a substantial way of decentralized management of health departments. To do that, we suggest to divide Iraq's health centers into different groups based on geographic areas. Each group can have three or four health centers, and they should their health programs, budgets, monitoring systems, etc. In this regard, local governments have to identify clear guidelines and plans to organize the relationship between Ministry of Health and other health centers in each area and give health centers authorities to develop and prioritize policies based on areas' needs.

Pitfalls. However, "Iraq stands out as a country with low education expenditure and the lowest health expenditure compared with other countries " (Public Expenditure Review for Iraq 2014, 43). For instance, according to the World Bank indicators, with regards to health expenditure as a percent of GDP, Iraq placed last among the set of comparator countries and regions, with an average of 3 percent of GDP (Education and Health Indices 2014). Therefore, Iraqi government reports on health indicates that 12 percent is spent on inpatient curative care, 25.5 percent is spent on medical and diagnostic services (Iraq NHA Team, 2011). Decentralization of health system has been identified as a critical factor to meet good health services in Iraq.

IV. Improving Access to Health Insurance: Government Identification Card Initiative

Iraq's interest in improving healthcare is next in importance. A healthy population alleviates poverty because resources once allocated to medicine and care can instead be used for the improvement of impoverished conditions. Not only could the poor use the money saved to spend on schooling and business investments, the time saved from bedridden sickness can now be used to work. To improve healthcare, it will require substantial investment in new infrastructure of the Iraqi health system. Improving health care ties back to the necessity of government decentralization and the implementation of the Health Insurance Law of 2020. If there is more autonomy given in the health sector, as recommended previously as a way to address government decentralization, then collection of funds can be more regulated and better allocated towards health care so that even Iraq's most impoverished citizens can afford access. Policy Area. Consider recruiting locals to be part-time regional staff in poorer areas to begin a decentralized, but concerted, effort to teach all Iraqis how to obtain a health insurance card (HIC). In order to include as many poor people as possible in health insurance, the Iraqi Ministry of Health, in cooperation with local people and civil society organizations, can open electronic platforms and programs for that card so that even the poorest people can obtain a health insurance card (HIC). From an exploratory analysis of the most pressing needs of the Iraqi government to encourage equitable growth in the country, we received the policy recommendation to continue the funding of health intervention programs in Iraq because of these programs' positive track records. However, while we believe that maintaining these national programs is valuable, we believe that more can be achieved by focusing on the foundational issue that has been responsible for decreased efficacy of these health programs when it comes to the most marginalized citizens of Iraq. Specifically, we believe that to effectively value a program's achievement, we require a baseline means of valuation of the total population it is affecting, as such, we believe that focusing on improving access to government identification for the poorest citizens is a necessary first step to proper program evaluation and monitoring of programs.

The central government of Iraq has neglected the poor and marginalized in their country and these people are poignantly aware of this. Because of the huge ideological clashes occurring in the country as a result of globalization from the sixties and seventies up to the early 2000s, the poor population in most of the central and southern governorates was trapped between neo-liberal economic and authoritarian political policies from the government as well as violent. Also, indiscriminate violence from other groups that hoped to gain power, such as the terrorist ISIS and Al-Qaeda organizations were and still threaten the security and safety of Iraqis . The rural poor and especially the indigenous groups were victims of both government indifference and revolutionary violence, so they kept to themselves and their communities for support rather than turn to a government preoccupied with becoming an international player or groups that sought to disrupt what little stability there was for these people.

For these reasons, there is a blasé distrust among the Iraqi people for centralized powers which are currently represented by the government of Iraq. Due to this predisposition the poorest poor prefer to remain 'off of the radar' so much.

There are more than a few obstacles for these poorest poor to get the (HIC). Firstly, the registration for the (HIC) , secondly the poor are unaware of the options available to them, and

finally many of the poor don't want anything to do with groups outside of their community, including being a part of national systems.

Of greater concern still, the most disturbing thing is that the institutions through which the health insurance card is obtained in Iraq have started their registration programs to obtain the health insurance card from the category of employees to the unemployed, which needs more time to achieve the goal of our policy here. The strategy of including employees with health insurance and then the poor classes who have no income takes a long time. So this is a dangerous and ineffective strategy for these people as health care is essential to the growth of these societies. Moreover, the incentive toward health insurance is not as strong as it should be, especially since many of these poor communities depend on agriculture and make their children work during the planting and harvest seasons - so they really have short-term incentives to take their children out of education.

Implementation. Rather than an overt government implemented initiative, we suggest developing a networked information distribution approach, by contacting the leaders in each community, and providing them with the proper materials to record and return the data of their communities to the national healthcare service centers, and then in turn distribute the government card to the individuals they have built a trusting relationship with. We also would provide incentives of families in basic healthcare insurance upon completing the government health card surveys and a free medical examination for the people who sign up through this initiative, and thereby offering a greater incentive to participate.

Pitfalls. There are uncontacted tribes still living in Iraq, it would be exceedingly difficult to bring these people under the healthcare system. The Iraqi government has already attempted a program of this sort that was badly incentivized, so there may be hesitation or resistance to attempt a more costly and comprehensive program such as ours. However, keeping in mind the importance of improving access to health resources for the poorest in Iraq, and the greater impacts of these issues on overall growth for the country, education about, and availability of, these resources remains an important issue that needs to be addressed to improve the plight of the poorest in Iraq. As such, we believe that with political will, and especially at both the local and regional levels being behind this policy proposal, significant improvement in this area can be attained.

V. Dual Policy Proposal to Improve Education and Water/Sanitation Infrastructure

The critical weaknesses of the education sector reduce the education's impacts on the poor in both rural and urban areas. As the opportunities after finishing school are limited and the cost of education is barely affordable to the poor, many families prefer having their children work on farms. In addition to education, the Iraqi government's plan to improve health conditions in the country has shown few results.

This policy would develop and scale up adult and child educational systems and vocational local training for installation to focus on maintenance of privatized community water resources and sanitation facilities by increasing internet access, educational opportunities for the indigenous communities by producing certified vocational workers, improving teachers education, and improving water resource technology construction, maintenance and operations certification as well as water rights and improved economic opportunities.

Policy Area. This program proposal seeks to address the following goals (improve water and sanitation infrastructure and provide improved vocational employment opportunities). Our proposal seeks to:

Increase inclusivity for the indigenous population

Focus education on skills needed for the job market

Consider strategies to invest government funds to create new jobs for graduates

The goal is that vocational education will increase job opportunities for recent graduates. "Education follows in importance as high education leads to future societal improvements. Paul Romer's economic model argues available knowledge will generate and further development and consequently, Iraq is striving to further the education of its citizens. The external assessments of the education sector in Iraq by both the World Bank (2014) and the European Commission presents how the lack of opportunities after school completion discourage many Iraqis from actually participating in education. One way to improve participation in education for a more positive social impact is to elaborate education programs that are geared toward practical knowledge and skills needed on the job market. Also, the government may spend the additional money allocated to education to create jobs that will hire newly graduate students" – exploratory project proposal guidelines offered by our colleagues.

In Iraq, poverty, "23% of Iraq's population live on less than US $2.2/day. Therefore, 500,000 children between the ages 5-14 are involved in child labour, most of them are in rural areas. This represents nearly eight-hundred-thousand indigenous children alone- between the ages of three and seventeen - living under two dollars a day growing up in a region where there are very little economic opportunities to better themselves or their situation (Situation of Children and women in Iraq 2011). One of the ways that young Iraqi people can better their situation is through education. While primary education has improved in recent years in urban areas through electronic platforms and some programs such as Google Meet and Zoom, there are systemic problems that still need to be addressed.

During the COVID-19 pandemic, the educational situation in rural areas specifically is hampered by several factors, including: limited government support for primary and secondary schools in rural communities, and limited government investment in the development of cultures and cultures. Thereby, these problems prevented achieving relative success of sustaining the educational systems. Thus, there is a need to expand educational and vocational opportunities for adults in rural areas. Iraq started with other programs for education and development, including distance education, as it was its first experience during the Corona pandemic period. The problem is now that these children and families have access to a basic computer but not a secure and reliable source of growing knowledge (reliable internet connectivity), and these children have this technology available to them even as their teachers have not caught up with the technology or have learned to integrate technology studies into their classroom environment. So essentially the urban communities in Iraq have access to basic hardware to improve their lot, but need improved access to better education systems (teacher training, health and safety concerns, connectivity) even as they still have poor prospects for work in their regions that are emphasizing basic education only.

A strikingly related issue to Iraq's concerns with education in the rural communities is improved water access and sanitation resources for improved health and other directly related

and fundamentally important issues. According to a UNICEF regarding the situation of the indigenous children in Iraq, compared to the rest of the country, "it is more difficult for the rural children population to find safe drinking water and sanitation services: less than 40% have access to safe water and not more than 20% have access to sanitary waste disposal" and this is obviously the same for the adult population (Situation of Children and women in Iraq 2011). Therefore, when children do not have access to clean water, it really affects their health, nutrition, education, and many other aspects of their lives. In hopes of improving this situation, "as part of its Water, Sanitation, and Hygiene programme, UNICEF is helping by digging wells and preparing and installing water desalination systems, because access to clean water is the right of every child and person"(UNICEF,2023) . In Ninewa, for example, UNICEF is assisting seven villages and remote areas in Ninewa Governorate, North-West Iraq, to ensure access to drinking water. Among the seven villages where UNICEF installed water systems, 100 per cent of the population was having problems accessing safe drinking water. Following UNICEF engagement, 80 per cent of the targeted individuals stopped relying on water trucking from remote water sources and began using the newly built water systems for both drinking and household purposes. UNICEF has been working on small scale projects to improve clean water access and sanitation for indigenous peoples in the rainforests of Iraq and training them on the use and maintenance of eco-friendly sanitation facilities in their communities. Their outlined program procedure, to "build a gravity water system and slow sand filter to deliver safe H20 to each home. Build flush latrines, sink, and eco-friendly septic system at the school. Establish health classes for teachers, children and mothers and technically train a water committee" is a decentralized, practical and practicable process that improves the health and welfare of the entire community with which they work.

Implementation. The program we are proposing here would work to address both the water and sanitation concerns as well as the concerns about educational and vocational opportunities for the poorest poor in Iraq. We propose to develop a three phase program of firstly improving the educational and water systems generally using what currently exists on the ground, secondly, improving the vocational opportunities available to the most marginalized Iraqis, and thirdly creating a socio-political landscape the promotes sustainability in literacy, vocational opportunities, health and water management, trends toward more inclusivity, and material wealth for the marginalized indigenous poor in the country.

We believe a tripartite strategy is needed to address these pressing problems. First, we will use government and private funding to fund educational and infrastructure building operations in the remote areas of Iraq. This entails a development of vocational schools that provide basic adult and child education with emphasis on math and science relating to water and health science with certifications offered in plant maintenance and operations.

Phase 1 – Educational and Institutional Infrastructure and Practical Management

First we would need to develop a reasonable curriculum and certification system that produces a sustainable training and education system that takes into account regional and cultural challenges like differing world-views. We need a solid strategic plan in order to make the skills transferable to further the integration of these marginal groups into society and get the best instructors for the program.

After we have a reasonable education infrastructure developed we will need to develop a concerted movement and conglomeration of NGOs, working with the Ministry of Health and training longer term instructors and facilitators who will operate at the local, regional and national levels. This training and education system would have to be a self-sustaining system as the ultimate goal is to decentralize the majority of the operations of the project to the local and regional levels. So, our training system would allow for local facilitators to become certified instructors by taking special courses to receive teaching certification in both general and vocational topics. The way this would work to improve inclusivity and help to close the gap of inequality of the indigenous groups, is that this system would have opportunities to allow certification all the way up to the national level in this industry for those poor people who want to pursue it. We would accomplish this by partnering with city, regional and national government agencies to work on special curriculum and certification that could be administered remotely and work with the locals to allow educational activities to work around the farming and harvesting seasons so that we can further integrate the marginal people into the greater society in the most responsible way possible.

Then, to complete the first phase of this project, we hope to do some exploratory research into developing remote telecommunication systems with all of the localities involved in the project. As there is already nearly sufficient 'hardware' infrastructure on the ground in these remote areas of Iraq, thanks to the efforts of the local groups and others, we would hope to take advantage of emerging technologies and potentially take these kinds of technologies and adapt them to the Iraqi demands. We would also need to create organizational infrastructure from the already existing indigenous and rural schools to better connect them with a regional authority and then the national ministry to improve oversight and standardization practices, also this would help improve inclusivity with the greater society. The foundational development or redevelopment of school and educational structures on the ground will have to be accomplished in an idiosyncratic approach as some regions may be underserved to the point that completely new schools ought to be constructed and staffed to reach the population that it needs to serve. For example, we would work with local instructors as 'facilitators' to organize the operation of the schools and determine the progress of students as national or international 'teachers' telecommute lectures and materials into the classroom, then when the local 'facilitator' passes certification in various subjects the lecturing and other responsibilities would be transferred to him/her.

Phase 2 – Vocational Infrastructure, Onsite Apprenticeships and Transition to Ownership The second stage will involve developing the regional infrastructure, including

construction and improvement of water and sanitation facilities, building organizational structures for educational systems that work – in both the basic education system and the vocational system – and beginning to build an organizational structure for transition from educational certification to on the job apprenticeships in construction, maintenance, and operation of water and sanitation facilities. After these issues are addressed and the sufficient educational and water and sanitation system facilities are operating with local staff reporting to regional hubs for standardization requirements, we would work toward transitioning the ownership of water rights and the sanitation and improved water resources to the local community as a private, decentralized utility service.

Phase 3 – Deepening of Value, Regional Utility and Water Rights Privatization as Utility
here is a great disparity in the extent of access to drinking water sources between governorates and between urban areas and the countryside. As (65%) of the households use the public water network as the main source of obtaining water drinking. The rural communities are in a unique position to be at the forefront of a boom in economic development of water technology and resources in Iraq. The majority of the poorest poor in Iraq live in locales faraway the rivers, from which the majority of the country receives its piped water. Throughout the country, Iraq's piped water infrastructure is still in disrepair. According to Central Statistical Organization(2011), at the national level, the access of households in rural areas to water from the public network is limited, as only (47%) of rural households use the public network as a source mainly for water, compared to (72%) in urban areas.

If the water and sewage treatment facilities, including pipes and other infrastructure is privatized in a utility-like way (private companies adhering to strict government regulation and price controls) then economic opportunities would increase as well as other investments in the country. Specifically, this policy could help the poor rural communities by grandfathering in water rights and ownership of the water treatment and sewage facilities to rural groups after providing the appropriate educational and vocational training through our program. We propose that with private-public cooperation in this manner can improve the situation of the populace of Iraq at large as well as its indigenous poor.

Pitfalls. Each phase of this proposal could encounter serious issues that would need to be addressed to make this project successful. This program essentially is defined by a decentralization of government oversight and a privatization shift of a public utility, as such this program constitutes a risk of decreased sovereignty for the government and greater power to marginalized groups. So there are certainly some issues that could come up that need to be addressed in each phase of the operation.

In the education phase, the biggest impediment to success would be an obstruction in any of the channels between getting the curriculum translated to practicable skills in the certified students. This could be especially disastrous if we find that instructors' effectiveness in producing employable labor is less than we expected. In this case, we would have to assess the effectiveness of the channels of the educative environment. For example, is the telecommuting system, while cost-effective, ineffective at holding student's attention? And is this because of a systemic problem, e.g. that children/people cannot learn effectively without a physical teacher present or a localized problem, i.e. the schoolhouse creeks, leaks, has no windows/ too many windows, and is not accessible to many people it was supposed to be accessible to, or this particular teacher is incompetent. We would try to preempt this problem by testing the telecommunication teaching strategy on a test school(s), then evaluating various approaches and their effectiveness.

In the vocational/transitional phase, because we will maintain complete transparency in the project and its implementation stages to build trust with the local communities, there could be some problems facilitating the transition from educating the community to the community taking over the means of production. Specifically there might be some disregard of the certification standards if the community knows that they will be receiving the structural control eventually anyway. This challenge would be addressed by the fact that only the local control

will be given over to indigenous control and they will still have to comply with regional and national standards, and by not cooperating with these standards they would risk the loss of economic gain and abilities for their graduates to integrate into the larger organizational structure throughout the country – i.e. decreasing their mobility in terms of opportunities to employ their training.

In the privatization phase, we could potentially run into the most severe obstacles to the implementation of this program, especially in resistance to change from the most marginalized rural groups who distrust the government and the greater society. Some of the more marginalized groups who tend to desire autonomy could benefit most from distance learning and privatized water and sanitation resources, however, this could also present issues with potential challenges to sovereignty etc. This is why we hope to use the educational and vocational pathways to build ties to stronger inclusivity of these and other marginalized groups that could also make rebellion less likely.

CONCLUSION

Iraq has come a long way since the 1980s until now. Iraq faced a war with Iran for eight years, then its war with the State of Kuwait in 1990-1991. It faced a war with the United States of America in 2003 and subsequent wars with terrorist organizations. Iraq witnessed, as a nation, it's had its share of growing pains. Today however, Iraq is now in a somewhat better situation, they are seeing a period of growth and prosperity in the county today the likes of which is unprecedented in the nation since before USA entered the country 20 years ago. But not all Iraqis have thus far enjoyed this era of economic prosperity, and most of the urban population and the rural poor are among the groups that benefit least from this progress. We believe, however, that by implementing our four proposed policies above to address (1) the issues of women's opportunities, (2) improved healthcare, (3) demographic accounting, as well as (4) improved water and sanitation infrastructure and improved vocational opportunities and education, the Iraqi government can continue the momentum toward greater inclusivity and socioeconomic equity for the poorest poor in the future. But, this will not happen overnight or without responsible and conscious consideration of the idiosyncratic issues facing Iraq's rural poor and marginalized. So careful and mature dialogue with these groups must be our primary priority so that, in consideration of the past, Iraqis in rural areas can grow and develop in a positive way in the future. And as the Iraqi government does move forward, hopefully with consideration of proposals of the kind that we have recommended in this paper, they would do well to serve these rural areas. We continue to hope then, in the economic future of Iraq, both ancient wisdom and modern growth can find synergistic solutions which benefit all Iraq.

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