

Nineveh Plains Needs Assessment Report

The case of ChaldoAssyrians and
other Minorities

April 2005

A proposal submitted by the

ISDP

Iraq Sustainable Democracy Project



Note: The views expressed in this and other papers associated with the ISDP do not necessarily represent the views of all the participating organizations.

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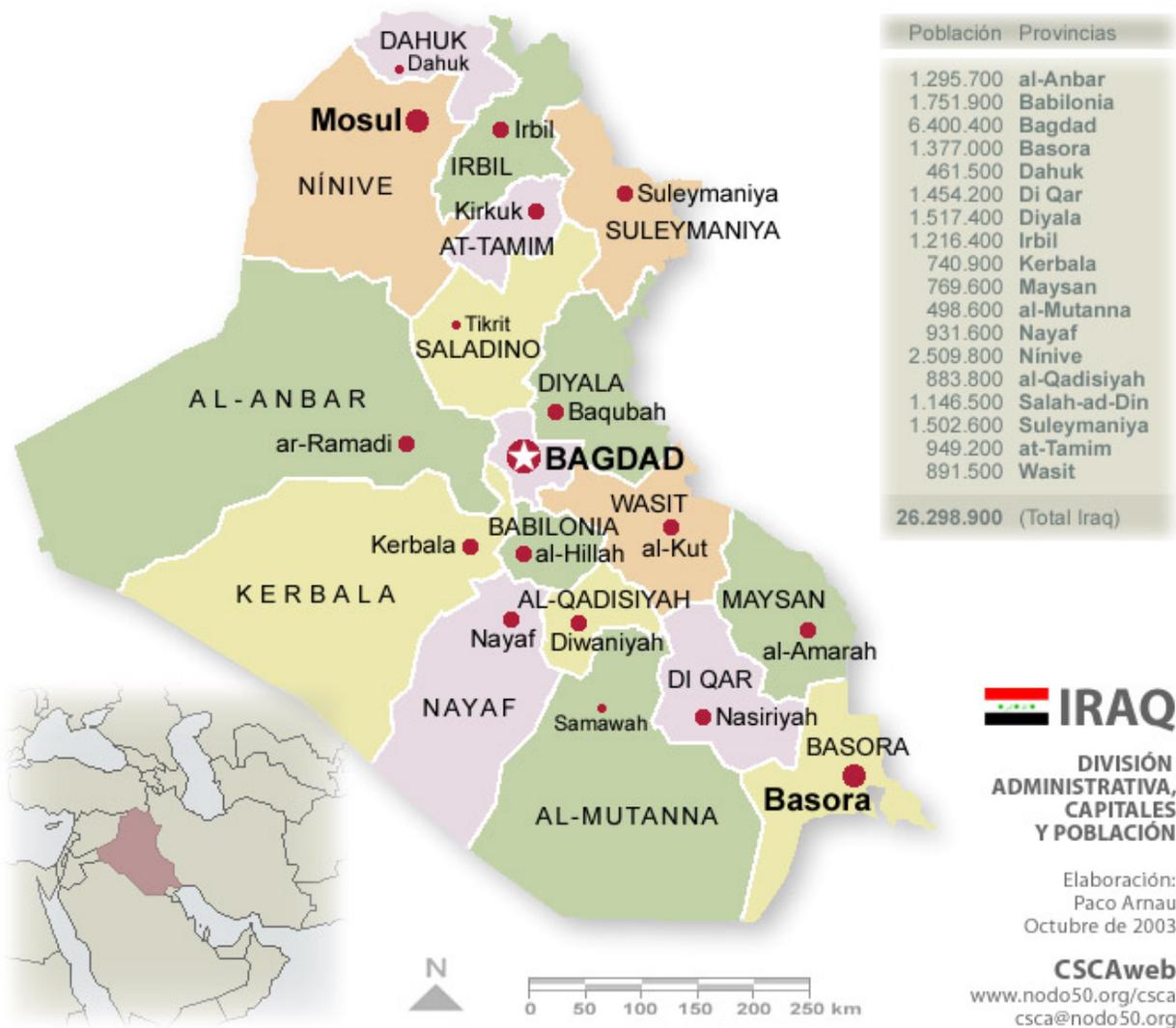
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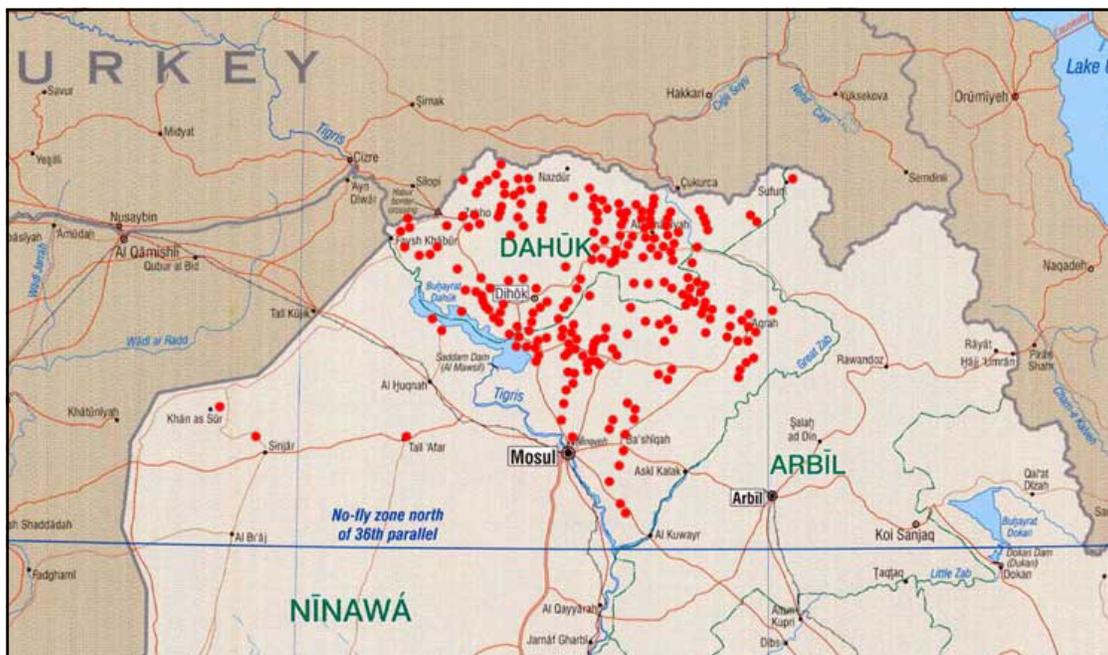


Map of Iraq with recent population figures. ChaldoAssyrian's native towns and villages are located in Iraq's three northern most governorates, Nineveh, Dohuk, and Arbil.

1. Executive Summary

ChaldoAssyrians (also known as Assyrians, Chaldeans, and Syriacs), like many of their compatriots, are rejoicing liberation from Saddam Hussein's Ba'athist rule. The opportunity before them is to move beyond the days of stifled development and persecution to realize much greater prosperity through the development of a democratic, pluralistic nation. ChaldoAssyrians remain ready to work with other Iraqis and the international community in an effort to bring about the desired transformation.

This document seeks to address the very real under-development of northern Iraqi minorities such as ChaldoAssyrians in the Nineveh Plain. This goal is congruent with the overall work of the Iraq Sustainable Democracy Project (ISDP), which sees as its focus the condition of the most vulnerable minorities as an indicator of the sustainability of Iraq's transition; this research and its proposals encompass other minorities, particularly of northern Iraq. These include the Shabak, Yezidis, and Turkmen. Further studies will emerge for other areas where these minorities predominate, but are not realizing equitable development in their communities.



ChaldoAssyrian towns and villages in 1961. More than 200 of these villages have been destroyed, evacuated, or taken over by neighboring Kurdish groups.

ChaldoAssyrians face a unique set of obstacles in realizing their development needs. They remain a relatively under-represented component of the Iraqi population vis-à-vis Arab Sunnis and Shi'a and the Kurds. There is only one independently elected ChaldoAssyrian in the National Assembly despite comprising approximately 5 percent of the population. There are five other ChaldoAssyrians in the Iraqi National Assembly. These five, as representatives elected on the lists of other groups, are unable to ensure ChaldoAssyrians' best interests at times due to conflicts of interests. ChaldoAssyrians also remain entirely under-represented in the Kurdish Regional Government with only 5 seats out of 105. As a result, they are a relatively 'voiceless' community. This places them at a great disadvantage in articulating their needs through representative institutions.

The Nineveh Plain is a predominantly ChaldoAssyrian area comprising, in the main, 10 contiguously placed towns. As a minority area, holding little to no political interest to the dominant groups of northern Iraqi politics, the Nineveh Plain and its inhabitants have seen little to no equitable development in their towns and villages vis-à-vis the rest of northern Iraq. This reality is creating an emigration 'push factor' driving people from the region and from Iraq. Reconstruction in this area will not only reverse the flight of ChaldoAssyrians and others in the post-liberation period, but ensure the continued presence of ethno-religious

An elderly nun passes by remnants of a recent car bombing on her way to the local church.



groups such as ChaldoAssyrians. In so doing, policy-makers will sustain the presence of a group that holds the key to genuine ethnic and religious tolerance and pluralism – a vital component in any effort to make Iraq's democratic transition sustainable.

The following table lists the overall projects to be taken forward by sector. The detail for each section can be found in the respective chapter in the main body of this document.

Table 1.1 Budget overview

Sector	Overview	Budget
Safety and Security	Police stations, personnel and equipment	Final details forthcoming.
Housing	Immediate and Extended Family Homes	\$ 56,340,000
Education	Primary, Secondary, Tertiary Institutions, and transport	\$ 35,925,115
Healthcare	Clinics, Pharmacies and Hospitals	\$ 8,029,400
Water	Networks, repairs, well development and construction	\$ 18,835,000
Sewage	Sewerage development, drainage channels and maintenance	\$ 19,755,350
Electricity	Generators and building a new network	\$ 607,555
Roads	Road development, construction, maintenance and paving	\$ 21,476,020
Agriculture	Machinery, factor inputs, irrigation channels, Model/Satellite Project (x4)	\$ 69,255,100
Media	Local/Community newspapers, Radio, TV	\$ 362,850
Human Rights	Human Rights Mission	\$ 85,000
Gender Rights	Women's Centers	\$ 2,100,000
Community/Youth Development	Community & Cultural Centers	\$ 3,210,000
Total (safety excluded)		\$ 235,981,390

A fundamental principal of this project is that all funds must be transparently and explicitly allocated for the purposes set forth here, or agreed to upon negotiation and finalization. Monies should be channeled through appropriate national government mechanisms in Baghdad to the respective ChaldoAssyrian representative bodies and agencies as detailed in Section 3 'Financial Allocations'. Monies should not go through the Kurdish Regional Government or through conventional channels such as the Churches. In developing Iraq as a democracy, and ensuring transparency and accountability, it is vital that the legitimate representatives and agencies of the community be responsible for defining plans and priorities and be accountable for their implementation.

2. Introduction

ChaldoAssyrians, like many of their compatriots, are rejoicing liberation from Saddam Hussein's Ba'athist rule. The opportunity before them is to move beyond the days of stifled development and persecution to realize much greater prosperity through the development of a democratic, pluralistic nation. ChaldoAssyrians remain ready to work with other Iraqis and the international community in an effort to bring about the desired transformation.

This document seeks to address the very real under-development of northern Iraqi minorities such as ChaldoAssyrians in the Nineveh Plain. This goal is congruent with the overall work of the Iraq Sustainable Democracy Project (ISDP), which sees as its focus the condition of the most vulnerable minorities as an indicator of the sustainability of Iraq's transition; this research and its proposals encompass other minorities, particularly of northern Iraq. These include the Shabak, Yezidis, Turkmen and Arabs. Further studies will emerge for other areas where these minorities predominate, but are not realizing equitable development in their communities.

In keeping with the international community's effort to assist Iraq in its reconstruction and rehabilitation following the adoption of the United Nations (UN) Security Council Resolution 1483 and the joint research effort of the UN and World Bank, the Assyrian Academic Society, in conjunction with an array of institutions and under the auspices of the "Iraq Sustainable Democracy Project", facilitated a micro-level, detailed analyses on the needs of this and other extremely vulnerable communities.

Teams comprising professionals and those with expertise on development initiatives provided key inputs allowing for the formulation of this document in an array of diverse sectors. The actual collation of information was performed by professionals in Iraq and Washington. The greatest contribution to this work comes from the Assyrian Aid Society and its engineers and researchers. The application of their expertise and analyses is synthesized into this document. The process of synthesizing and analyzing the data into this document was done in an iterative process of consultation between ChaldoAssyrian Iraqis, and their counterparts in the United States. This project establishes a paradigm for constant consultation and dialogue between these parties for ensuring a development trajectory based on priorities set by Iraqi communities and refined by experts.

As a result of the extraordinarily poor socio-economic conditions in Iraq, this assessment identifies the most pressing, urgent needs of this group, which is the third largest ethnic group in Iraq, and the needs of other northern Iraqi minorities. Consequently, its focus is on

the most immediate areas of reconstruction and development necessary to alleviate the most pressing concerns of this community at the present moment. Longer-term studies and assessments will ensue with the rolling-out of the projects stipulated here.

This document seeks to provide decision-makers, funders, development organizations (governmental and non-governmental) with a detailed appreciation for projects that are critical and require immediate resource allocations and implementation. The timeframes for these allocations, in ideal circumstances, is fiscal year 2005-06, and can possibly catered for in the amendment budgets of various entities.

Compiling much of this data regrettably also required a large measure of discretion. ChaldoAssyrians have suffered economic discrimination under each governing authority since the formation of Iraq.

The vast majority of reconstruction funding (bilateral and multinational) proportionally speaking, is not going through ChaldoAssyrian authorities, but those of more numerically dominant groups such as the Kurdish Authorities. Efforts to seek equitable development, transparency and accountability have caused tension, and even the threat of reprisals against ChaldoAssyrians. The process of collecting the information in these areas required utmost



One of the many ChaldoAssyrian Churches destroyed prior to Christmas of 2004 widely believed to be aimed at uprooting the native Christian communities from Iraq

discretion. For this reason, a measure of detail is at times missing – although the clear need for the project is established. It is possible to collate greater degrees of information with more detail, upon indications of interest from donors.

Over time, each sector assessment will expand to include analyses of less immediate areas of concern and propose necessary projects with a medium-term outlook (2-3 financial years).



Chaldo-Assyrians, Yazidis, and Shabak tribal leaders in Nineveh continue to work together on interfaith cooperation and understanding. Photo showing religious and community leaders from the above mentioned groups in a community conference in Mosul in 2004

3. Financial Allocations

A fundamental principal of this project is that all funds must be transparently and explicitly allocated for the purposes set forth here, or agreed to upon negotiation and finalization. Pursuant to that basic principle, it is essential that the funds be transferred to the appropriate bodies or agencies that legitimately represent ChaldoAssyrian interests in the respective sectors put forth below, and as would stand to be expected in any society governed by the rule of law, and the emphasis on proper civil governance.

This qualification stands to reason in most budgeting and decision-making corridors. Except that ChaldoAssyrians are confronting a situation whereby funds are transferred to unrepresentative bodies such as the KRG. A lack of meaningful representation prevents a robust articulation of community needs through elected representatives. This prevents concerted efforts at meeting the basic development needs of ChaldoAssyrians and other minorities. Furthermore, it can reinforce patterns of behavior inconsistent with the best developmental interests of certain minorities. For example, KRG authorities at times distribute monies in way threat deliberately or not, divide the community. A principal means by which the KRG and its officials do this, is to transfer monies to churches along sectarian lines that demand endorsement of the KDP, driving divisions within the community. This type of financial disbursement was common, and deliberately done, under Saddam Hussein's dictatorship.

The legacy of Church involvement in resource issues dates to the period under Saddam Hussein when it was almost impossible to securely transfer monies to the community when it was in dire need. A pattern developed of transferring monies to the Church as a measure of last resort. The Church fulfilled an integral role during that period and carried a great burden in doing so. With liberation, there is no longer a need to transfer monies directly to the Church or to channel development funds through the Church. Where this is done, it constitutes the undermining of the democratic development of the ChaldoAssyrians in the Iraqi political fabric by disempowering their legitimate political and civil institutions. Conversely, by ensuring the monies go through appropriate governing and civil structures, it reinforces the democratic development of these bodies.

The politically representative bodies are only those who are independently elected ChaldoAssyrians in the National Parliament. In this capacity, these representatives should be consulted as they play an integral role in defining the needs of towns and villages with total or principally ChaldoAssyrian populations. At the sub-national level, all transfers should go to the regional, city, town and village authorities who approved the definition of

these development needs and are the most legitimate decision-makers on the application of funds.

Beyond legitimate governing authorities that are truly representative, there is an array of accredited and long-standing civil society organizations that have played fundamental community development roles in the civil sphere of ChaldoAssyrian life. These are legitimate organizations with standing constitutions, and transparent systems of financial management. Furthermore, their leadership is immediately influenced by the community, meaning there is a viable means of accountability between each organization and ChaldoAssyrians. This stands in stark contrast to the KRG (which uses ChaldoAssyrian “frontmen” within their party to stifle the ability of legitimately representative bodies to articulate policy demands).

These organizations are:

Assyrian Aid Society

President: Rommel Moshee Esho

Location: Iraq - Dohuk

Email: rommelaas@yahoo.com

Tel Mobil :07501349 , Local : 7222082

ChaldoAssyrian Student Union

President: Nenos Youkhana

Location: Iraq - Baghdad

Email: nenos_youkhana@yahoo.com

Tel: Mobil : 07901786759 , Local : 017470432

Assyrian Women’s Union

President: Pascale Warda

Location: Iraq - Baghdad

Email: pascale_warda@hotmail.com

Tel : 019143603898 , 019148225368,

Local : 0154109160

Nineveh Institute for Research and Development

President: Michael Benjamin

Location: Iraq – Nineveh, Al hamdaneey - Qaraqosh - Ashur TV Building

Email: mikhael_ben@yahoo.com

**Tel : 060 362612 , 062 722 0699 ,
mobile 07504680489**

Upon approval of each spending proposal, negotiations can ensue as to identifying the government representative or appropriate agency for managing the application of the funds. Funds should be channeled through legitimate community based and sponsored NGO’s that have a substantial ChaldoAssyrian constituency.

4. Development Framework

ChaldoAssyrians, as an ethnic group are one. They commonly broken down into various religious denominations, principally including Chaldean, Syriac Catholic, Syriac Orthodox, Presbyterian, and the Church of the East, but also have internal, tribal distinctions.

ChaldoAssyrians face a unique set of obstacles in realizing their development needs. They remain a relatively under-represented component of the Iraqi population vis-à-vis Arab Sunnis and Shi'a and the Kurds. There is only one independently elected ChaldoAssyrian in the National Assembly despite comprising approximately 5 percent of the population. There are five other ChaldoAssyrians in the Iraqi National Assembly. These five, as representatives elected on the lists of other groups, are unable to ensure ChaldoAssyrians' best interests at times due to conflicts of interests. ChaldoAssyrians also remain entirely under-represented in the Kurdish Regional Government with only 5 seats out of 105. As a result, they are a relatively 'voiceless' community.

Despite overall successful elections in the country, it is worth noting that problems¹ in major ChaldoAssyrian population centers precluded a majority of them from voting. Hence they fall far short of their expected electoral performance of 6-10 ChaldoAssyrian representatives running on a ChaldoAssyrian list. Conservative estimates declare that 5 percent of the population is non-Muslim². This suggests that 1.5 to 2 million Iraqis are of ChaldoAssyrian, Yezidis, Shabak, Mandaean and Turkmen background. ChaldoAssyrians comprise a large portion of that figure, placing their population within Iraq at approximately 1 to 1.5 million³. This provides some indication of the scale to which they are under-represented both in the National Assembly and the Kurdistan Regional Government.

The key policy challenge for Iraq's liberators and the international community, is to reverse

1. The ballot boxes did not arrive in several major ChaldoAssyrian towns and when they arrived the following day, the poll workers did not arrive – denying the communities a chance to vote.
2. USCIS, "IRQ00001.ZLA". <http://uscis.gov/graphics/services/asylum/ric/documentation/IRQ00001.htm> (accessed April 14, 2005).
3. The calculation of this figure is based on a range from the conservative estimates of the United States Citizenship and Immigration figures and that of the CIA World Factbook. Media sources also consistently place the figure at a range of 850 000 to 1 million.

the trend of emigration by ChaldoAssyrians from Iraq. Rough estimates indicate that somewhere between 60,000 to 80,000 have fled since liberation. Multi-faceted strategies of attacking and undermining this community are fueling a significant flow of ChaldoAssyrian refugees into Syria, Jordan and Turkey. In essence, one of the unintended policy outcomes of the liberation is the cleansing of the ChaldoAssyrian Christians from Iraq – something no past Islamic or Iraqi regime was ever able to achieve.

Given the importance of this transitional process and the patterns it will entrench, it is vital that ChaldoAssyrians, among other minorities, find redress developmentally. This will ensure equitable treatment allowing them equal opportunity to make their contribution to Iraq's reconstruction and ensuring their presence in their indigenous homeland.

Security is of vital importance to ChaldoAssyrians. Multi-national forces are stretched and the use of security contractors is mainly for protecting human and capital assets for foreign agents. Given the targeting of ChaldoAssyrians for their ethnicity and Christian religion, they face extraordinary pressures in committing to the development of their areas. The inability to ensure the security of this group acts as one among several push factors contributing to the inordinately high levels of emigration. The concern is that security may not be provided in sufficient amounts for this community before irreparable damage is done – leaving the country cleansed of its indigenous inhabitants.

The ChaldoAssyrians principally reside in the north, a sizeable element of which is under Kurdish Authority control (with three provinces comprising the KRG). It is split between the two major Kurdish factions: the Kurdish Democratic Party (KDP) and the Patriotic Union of Kurdistan Party (PUK). This means that separate development has been taking place and that ChaldoAssyrians have been caught in the middle of years of factional fighting between the KDP and PUK, who only arrived at a ceasefire in late 1997. While the population of northern Iraq generally fared better than their counterparts to the south under Saddam, they nonetheless have endured problems with weak state structures that have been seized. This cannot be allowed to happen in the Nineveh Plain.

ChaldoAssyrians, unlike many of their Iraqi compatriots, unwittingly benefited from their faith in educational terms. Christian-run schools produced excellent students for tertiary and technical school education. ChaldoAssyrians are noted as disproportionately containing

the much sought after human capital in the country. For Iraq's liberators and international development agencies, ChaldoAssyrians represent a key ingredient in achieving a sustainable transition to democracy and economic recovery. They must therefore factor into the strategies of these external stakeholders and that of the nascent Iraqi ministries if they are to enhance their chances of attaining the sustainability of the overall transformation and reconstruction enterprise.

On a last but vital note, ChaldoAssyrians confront similar challenges to their compatriots across the country who are living without basic, essential infrastructure. Regrettably, as a voiceless community within the country, they are unable to see a proportional measure of redress of their problems. This is a key reason for the production of this study. The dilapidation of most ChaldoAssyrian population centers requires major infrastructural investment. Roads, water, electricity, sanitation, and other basic requirements are outstanding. This undermines efforts at economic revival leaving ChaldoAssyrians in a state of economic stagnation, which will erode their ability to contribute to Iraq economic recovery and democratic transition.

5. Context

The ChaldoAssyrians endured, proportionally-speaking, the same ethnically-driven persecution as the Kurds. Compounding the suffering and targeting of the ChaldoAssyrians is their faith. Previous regimes and others in Iraq target them as Christians, which is an aspect of their existence as an ethno-religious group. While the regime could not overcome the reality of Kurds, who comprise 16-17 percent of the population, they set about an ambitious project to eliminate the numerically more vulnerable ChaldoAssyrians as an ethnic group from the Iraqi national fabric.

This effort included ethnic cleansing, in the form of mass murders and the denial of basic rights to encourage flight from the country. The destruction of their churches, torture and executions followed a pattern seen throughout the Anfal, as with the Kurds. This process of “Arabization” includes compulsory alteration of one’s ethnically Assyrian name into an Arab name and Arab status on a “nationality correction form”. Rejecting this requirement resulted in immediate eviction⁴.

In some cases, the penalty for not accepting Arabization was higher. Indict.org, the human rights group established by a British Member of Parliament on Iraqi War Criminals, records that in one documented instance, ChaldoAssyrians and Yezidis brought back to Iraq under an amnesty from Turkey were separated from the returning Kurds in Dohuk, taken away on buses and never seen again⁵.

One of the several Assyrian Churches destroyed by the Saddam Regime during the Anfal Campaign..



Since the establishment of the No-Fly-Zone, ChaldoAssyrians have also been facing “Kurdification”. There is a documented pattern of Kurds classifying ChaldoAssyrians as “Kurdish Christians”⁶. These patterns in the treatment of ChaldoAssyrians is consistent across Iraq and over time by previous regimes – indicating that very little has changed for this community. Their treatment in northern Iraq from the time of the no-fly-zone is no better or worse than at any other point since the creation of Iraq.

Compounding the problem are serious questions about the attacks on ChaldoAssyrians in northern Iraq – where they predominate – committed with impunity (a key tactic in generating fear and fueling ChaldoAssyrians to seek refuge outside of Iraq). United States Citizenship and Immigration RIC records that even high profile murders are not seriously investigated and large scale, coordinated attacks on multiple villages by KDP forces were confirmed by the International Committee of the Red Cross⁷.

The Nineveh Plain is a development priority in northern Iraq. Its present underdevelopment (sustained by the Iraqi authorities under Saddam and during the no-fly-zone period) is spurring a crisis among the population as they see themselves tangibly and deliberately excluded from the benefits of liberation and reconstruction. Concerted efforts to focus on the localities of the Nineveh Plain are certain to make a substantial difference in the socio-economic despair felt by the communities. The level of demands on Iraqi authorities and the development needs of demographically larger groups is overwhelming the attention needed for ChaldoAssyrian and other minority needs.

ChaldoAssyrians in Iraq presently have an uncertain future. Liberation from Saddam ensures against certain ethnic cleansing and cultural genocide. Nonetheless, liberation is also heightening patterns of behavior by key actors (such as the KDP and Islamic insurgents) that is generating the undesirable exodus of this community, regardless of various stakeholders’ best intentions. It is of critical importance that this exodus be terminated and reversed, for the long term sustainability of Iraq’s transition.

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4. Human Rights Watch. “Iraqi Refugees, Asylum Seekers, and Displaced Persons: Current Conditions and Concerns in the Event of War”, February 13, 2003. <http://www.hrw.org/background/mena/iraq021203/2.htm> (accessed April 12, 2005).
 5. Indict.org, “The Anfal Offenses 1987-1988”. <http://www.indict.org.uk/crime/details.php?crime=Anfal>
 6. Indict.org, “The Anfal Offenses 1987-1988”. <http://www.indict.org.uk/crime/details.php?crime=Anfal>
 7. USCIS, “IRQ00001.ZLA”. <http://uscis.gov/graphics/services/asylum/ric/documentation/IRQ00001.htm>

6. Macroeconomic Framework

It is well-established that government expenditure and plans provide a key direction to macroeconomic conditions in any market economy. Given the Iraqi economy's massive over-reliance on government-public sector expenditure, it plays a determining factor in burgeoning macroeconomic conditions.

These funds principally come from United States (US) sources. Looking at these funds and their application provides key insights into the role public-sector spending is playing in Iraq. The early indications are that there is little ability to ensure that funding is going to the areas intended and is being used for equitable development for all of Iraq's diverse groups. The Special Inspector General for Iraq Reconstruction (SIGIR) states in the 2005 audit report entitled, "Oversight of Funds Provided to Iraqi Ministries through the National Budget Process":

"The CPA did not exercise adequate responsibility over DFI [Development Fund for Iraq] funds provided to Iraq Ministries through the national budget process. Specifically, the CPA disbursed over \$8.8 billion in DFI funds to the Iraqi ministries without assurance the monies were properly used or accounted for. Neither the CPA Ministry of Finance/OMB nor CPA senior advisors reviewed the internal controls in the Iraqi ministries. Further, CPA personnel did not review and compare the financial, budgetary and operational performance to planned or expected results. Resolution 1483 required the CPA to disburse funds from the DFI in a transparent manner to meet the needs of the Iraqi people. By not adequately reviewing the use of and accounting for the DFI funds provided to the Iraqi ministries, the CPA did not meet the mandate of Resolution 1483 with respect to this issue.

[...] In June 2003, the International Monetary Fund (IMF) provided preliminary observations to CPA officials that noted the most urgent issue in the financial area was not budget planning but budget execution... an October 2003 IMF assessment indicated the Iraqi ministries implementation of the budget would require a strengthening of payment and accounting functions...a management consultant for United States Agency for International Development reviewed internal controls at

one Iraqi ministry in April 2004 and concluded financial management and internal controls over the ministry's approximate \$435 million budget were either weak or non-existent and the financial process was open to fraud, kickbacks and misappropriation of funds.”⁸



Notes reads “Death to US Agents, Al-Qaeda organization”. Chal-doAssyrian Christians are prime targets to such fundamentalism as they are seen to share the same religion as that of the US leadership.

Similar findings arise in the CPA's ‘Contracting Activity’ function. Given the amount of monies involved in contracting, this is also a critical indicator. The “Conclusion” section of the audit report states:

“The CPA Contracting Authority had not issued standard operating procedures or developed an effective contract review, tracking and monitoring system. In addition, contract files were missing and incomplete. Further, contract officers did not always ensure that contract prices were fair and reasonable, contractors were capable of meeting delivery schedules, and payments were made in accordance with contract requirements. As a result, the CPA Contracting Activity was not accurately reporting the number of contracts awarded by the CPA Contracting Activity. This hindered the CPA Contracting Activity's ability to demonstrate the transparency required of the CPA when it awarded contracts using DFI funds.”⁹

Pre-liberation cronyism, corruption and general lack of structure in the Iraqi economy demands a process of developing a culture of transparency and accountability system that

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8. Special Inspector General for Iraq Reconstruction, “Oversight of Funds Provided to Iraqi Ministries through the National Budget Process”, Report No. 05-004, January 30 2005. P. 6-7.
 9. Special Inspector General for Iraq Reconstruction, “Coalition Provisional Authority's Contracting Processes Leading Up To and Including Contract Award”, Report No. 04-013, July 27, 2004. P. ii.

Children in the Nineveh plains play inches away from exposed sewer systems along the streets last maintained back at the start of the Iraq-Iran war.



can build investor (internal and external) confidence. International funds, such as the United States', are a key policy lever for such an effort. Unfortunately for at least two years, and likely longer, such an opportunity was lost. These audit reports, which are only a sample, indicate that public expenditure in Iraq is likely maintaining past systems of corruption and cronyism, only this time it is subsidized by outsiders. In essence, the allocations become "discretionary funding" for Iraqi governing structures that are not monitored, allowing them the freedom to pursue independent agendas.

In northern Iraq, under Iraqi jurisdiction and the jurisdiction of the KRG, this reality is compounded by the fact that ChaldoAssyrians are not realizing a proportionate, equitable level of development. This means that a key aspect in determining the macroeconomic framework – public expenditure – is also perpetuating second class citizenship for ChaldoAssyrians. In this sense, it further dislocates this community from participation in the formal economy or from tapping its full potential both in financial and human capital terms. The transfer of funds to Iraqi authorities that do not legitimately speak for ChaldoAssyrians allows their policy and decision-makers to sustain patterns of preferential, politically-driven resource application, perpetuating the same conditions during the Hussein era. The immediate outcome becomes an unsound macroeconomic framework. The ultimate outcome is a threat to the sustainability of Iraq's democratic transition and economic recovery.

The economic discrimination confronting ChaldoAssyrians is sustained by a lack of transparency that is presently pervading public expenditure and invariably impacting on the macroeconomic framework. *The shortcomings these indicators provide on the macroeconomic framework suggest the need for explicit funding allocations along proportional lines for basic development projects for ChaldoAssyrians.*

7. Private Sector Development

Today's development environment, with shrinking budgets a maxim, demand intense focus on private sector development for ensuring economic recovery. Iraq's past command economy mixed with extraordinary levels of corruption mean that a substantial task lies in developing a sound private sector that can meet the needs of the economy. A determining factor right now in developing Iraq's private sector is providing for the rule of law and the enforceability of contracts.

ChaldoAssyrians, as an ethno-religious minority, are facing extraordinary pressures driving them from the country despite being liberated. The inability, and at times unwillingness, to provide ChaldoAssyrians with the same level of security as their compatriots impacts directly on the level to which they assume a role in the private sector commensurate with their capabilities. Information compiled from the establishment of the northern no-fly zone and since the liberation of Iraq reveals patterns that serve as disincentives for ChaldoAssyrian participation in the private sector.

ChaldoAssyrian businesses are subject to seizure, direct intimidation and at times violence. Amnesty International and other human rights non-governmental organizations (NGOs) have documented many of these incidents.

Without any recourse, the message these and other such acts give to potential ChaldoAssyrian entrepreneurs is that your investments come with high risk and no avenues of justice. The resonance of this message is compounded by the absence of investigation for other crimes, non-business related crimes because they are perpetrated with impunity. Proprietors are community members, and often long time members in small communities. The personal safety and security issues also impact directly on their sense of the business climate.

Clearly, this challenge only compounds the standard challenges facing all entrepreneurs in Iraq; poor infrastructure (roads, electricity, water, communications).

ChaldoAssyrians are a group with significant financial and human capital resources. These

resources allow the group to play a greater proportional role in Iraq's economic recovery making them inherent national assets. The conditions outlined above demand that policy-makers focus on the rule of law and enforcement in line with the Transitional Administrative Law's call for equality of all groups. In so doing, ChaldoAssyrians can be assured of having their business rights protected either from seizure or violence.

It is also important to note that ChaldoAssyrians, being a small population, cannot operate in a closed, communal economy and survive. Their demographic situation compels them to meet consumer demand from all population groups. This also allows for business growth and job creation for other groups. The present stifling of the small, medium and large enterprise development of ChaldoAssyrians represents a serious opportunity cost in foregone economic growth for all. The priority remains developing the means to ensure that ChaldoAssyrians have equal rights before the law in their business affairs.

8. Safety and Security

Collapses in the rule of law described in the preceding section also apply to matters of safety and security. The personal safety and security challenge for the ChaldoAssyrians is heightened in the post-liberation transition period with major groups seeking to maximize their position in Iraq at the expense of others. Present trends must be seen in the context of events around safety and security during the no-fly-zone years and the post-liberation period.

The situation facing ChaldoAssyrians as a broad group is one of no legal rights or equality before the law. Assailants victimizing ChaldoAssyrians are able to do so with almost total impunity – the exceptions arising from direct international intervention. In an environment where deliberate targeting of ChaldoAssyrians takes place on ethno-religious lines (see section 11.1 ‘Human Rights’), attacks by insurgents, elements of the Peshmerga, common criminals and brigands serve to exacerbate ChaldoAssyrian fears and further drives the present refugee crisis of the post-liberation period.

ChaldoAssyrians have long been victim to well-documented crimes that lack adequate government intervention. Denying ChaldoAssyrians their right to safety and justice relegates the group to second-class citizenship and creates a powerful emigration ‘push factor’. These instances have been well-documented by Amnesty International, the Assyrian International News Agency, Human Rights Without Frontiers, and Human Rights Watch

The documented incidents mark the violence and variety of types of attacks on a variety of individuals: Youth members of the Assyrian Democratic Movement, a quiet resident of a typical Iraqi town, and a family man working for an oil company in Kirkuk. The impunity combined with the lack of reason behind these types of attacks provide a powerful signal to ChaldoAssyrians. This pattern is something that Amnesty International observed as far back as 1997. In one report AI finds that, “The absence of accountability has allowed the KDP and PUK to continue abusing their authority, and for individuals affiliated to them to perpetrate human rights abuses with impunity.”¹⁰ Amnesty International’s findings still apply for the ChaldoAssyrians in northern Iraq.

10. Amnesty International, *Iraq: Human Rights Abuses in Iraqi Kurdistan Since 1991*. <http://www.amnestyusa.org/countries/iraq/document.do?id=487C2D0CAF7141C4802569A500714DC6> (accessed April 9, 2005).

As relations between the two major Kurdish factions improve, it produces a drop in the nominal level of factional and clan-based violence. This means that little attention is drawn to the violence that still includes ChaldoAssyrians, which is on the rise as groups such as Islamic insurgents see an opportunity to expunge the minority as Iraq moves towards a new political arrangement.

Bearing this reality in mind, and the constant flow of information from northern Iraq on ethno-religiously driven violence against ChaldoAssyrians, it is vital to develop alternative means of ensuring the personal safety and security of this community – thereby stemming the growing refugee crisis.

The principal policy lever applies to areas where ChaldoAssyrians have a ‘critical mass’ vis-à-vis other groups such as in the Nineveh Plain. In many of these areas there are no Kurdish residents. In some cases the Kurdish residents represent a first wave of land invasions that are also violations of others rights to return and represent one arm of a ‘Kurdification’ strategy. To resolve this, locally-based police forces must come into existence with personnel drawn from the communities and funded through appropriate channels.

The main towns that require local police forces not staffed by Peshmerga but instead by qualified persons from the community are:

- Alqush
- Bakhdeda
- Bartilla
- Ba'qope
- Bashiqa
- Batnaya
- Karamles
- Sharafiya
- Telesqof
- Telkaif

These ten towns all have a critical mass of ChaldoAssyrians that are presently enduring a

substantial amount of hardship. Their personal safety and security is not assured as various elements as some Iraqi provincial authorities police their areas with a view to perpetuating the conditions documented by, *inter alia* Amnesty International, Human Rights Watch, and Assyrian International News Agency.

9. Housing (resettlement, land tenure, and property rights)

Arabization policies, Saddam's wars and intra-Kurdish factional warring, among other factors, contributed greatly to generating a substantial housing crisis for the ChaldoAssyrians. Most of these people lack secure tenure and find they are unable to enjoy property rights.

Land invasions, a phenomenon manifesting particularly in northern Iraq, is another driving factor behind the housing crisis facing ChaldoAssyrians. The Transitional Administrative Law (TAL) provides Iraqis with the right of return and redress for lost property (especially homes). The need for this is well-documented. For example, an unknown figure of ChaldoAssyrians were driven out of Kirkuk. Many of whom fled northwards to join their relatives. Amnesty International reported on this Ba'ath Party policy almost from its inception. In 1999, it was able to assert that:

*"Since mid-1997 thousands of Kurds and a number of other non-Arabs, including Turkmen and Assyrians, who have lived all their lives in the Kirkuk region, which is about 260 kilometers north of Baghdad, have been expelled to the Kurdish provinces in the north controlled by the Kurdistan Democratic Party (KDP) and the Patriotic Union of Kurdistan (PUK) because of their ethnic origin and because of Kirkuk's strategic location as well as its oil fields...[If] they choose to go to the north their properties, as well as their food rationing cards are confiscated by the authorities. The majority of the families have reportedly chosen to go north."*¹¹

The housing situation demands greater attention than what is put forth here. The following requirements represent an initial tabulation in areas where the need is most pronounced and where families and persons could be reached in relative safety for the research team on the ground in Iraq. The figures below reflect the development of two standard housing types.

One type of home is a standard unit for large immediate families. The house is 1020 sq. ft. ChaldoAssyrians maintain higher birth rates relative to western societies. It can comfortably house 4 to 8 persons. This type of home is a standard brick and mortar structure. It includes developing appropriate stands for the top structures thereby ensuring longevity and maximum durability of the home. The cost per unit is roughly \$9,000.00 at \$28.95 per square foot.

The second type of home is for larger, extended families. The house is 2200 sq. ft. It houses significantly more people for ChaldoAssyrians still living in extended family systems that are



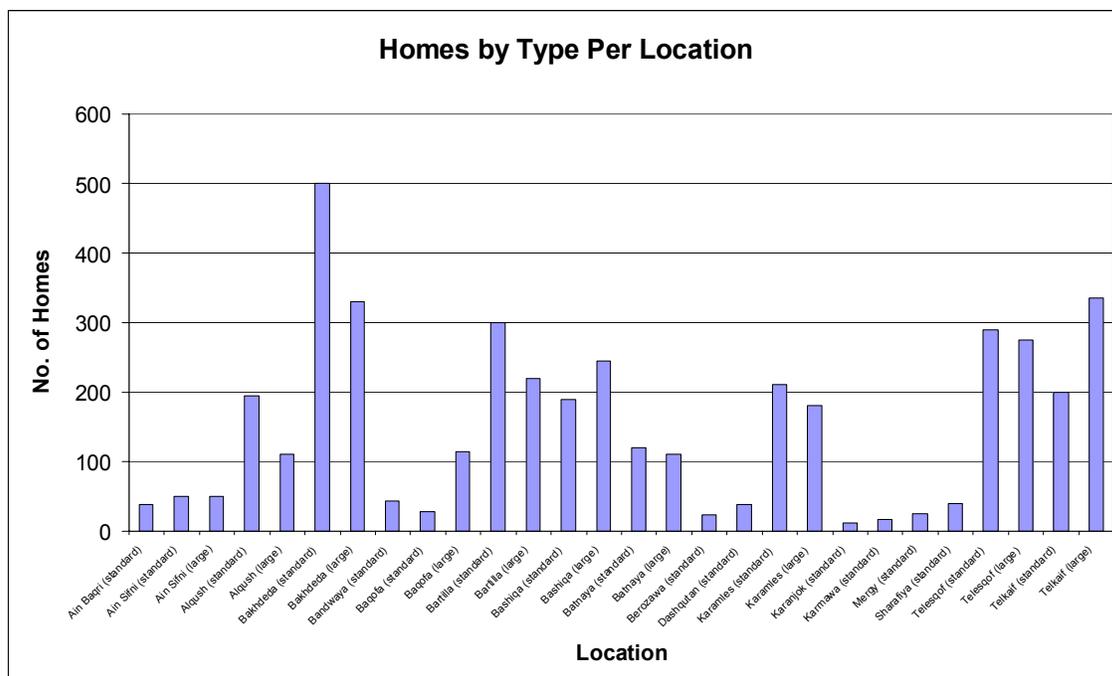
Dilapidated homes continue to be a common scene in the Nineveh Governorate. Photo taken in April 2005 of a currently inhabited home by a large family in the district of Hamdaniya, Nineveh, Iraq.

integral for their cultural survival. These homes are twice the cost but realize a greater degree of cost efficiency through economies of scale factors. At a cost of \$18,000.00 per unit, the house actually costs \$26.85 per square foot.

Both these homes are substantially larger than the homes developed by UN Habitat which are designed at approximately 79 square meters¹². The UN Habitat structures are not suitable for developing sustainable communities. The larger homes for this project represent a basis for greater community sustainability.

The total cost of the project is \$56,340,000.00. The project will house at least 4290 families across 18 towns and villages that are in desperate circumstances.

Figure 9.1 Housing Overview



11. Amnesty International, "Iraq Victims of Systematic Repression", November 24, 1999. <http://web.amnesty.org/library/Index/engMDE140101999> (accessed April 15, 2005).
 12. United Nations Habitat, "Clarification of UN-HABITAT's audit reports under OFFP in Iraq", http://www.unhabitat.org/iraq_audit_report.asp (accessed April 15, 2005).

Table 9.1 Housing Development by Town/Village

Town/ Village	Description	Cost
Ain Baqri	Standard Structure (No = 38)	\$342,000
Ain Sifni*	Standard Structure (No = 50)	\$450,000
Ain Sifni*	Large Structure (No = 50)	\$900,000
Alqush	Standard Structure (No = 195)	\$1,755,000
Alqush	Large Structure (No = 110)	\$1,980,000
Bakhdeda	Standard Structure (No = 500)	\$4,500,000
Bakhdeda	Large Structure (No = 330)	\$5,940,000
Bandwaya	Standard Structure (No = 43)	\$387,000
Baqofa	Standard Structure (No = 28)	\$252,000
Baqofa	Large Structure (No = 115)	\$2,070,000
Bartilla	Standard Structure (No = 300)	\$2,700,000
Bartilla	Large Structure (No = 220)	\$3,960,000
Bashiqa**	Standard Structure (No = 190)	\$1,710,000
Bashiqa**	Large Structure (No = 245)	\$4,410,000
Batnaya	Standard Structure (No = 120)	\$1,080,000
Batnaya	Large Structure (No = 110)	\$1,980,000
Berozawa	Standard Structure (No = 24)	\$216,000
Dashqutan	Standard Structure (No = 38)	\$342,000
Karamles	Standard Structure (No = 210)	\$1,890,000
Karamles	Large Structure (No = 180)	\$3,240,000
Karanjok	Standard Structure (No = 12)	\$108,000
Karmawa	Standard Structure (No = 17)	\$153,000
Mergy	Standard Structure (No = 25)	\$225,000
Sharafiya	Standard Structure (No = 40)	\$360,000
Telesqof	Standard Structure (No = 290)	\$2,610,000
Telesqof	Large Structure (No = 275)	\$4,950,000
Telkaif	Standard Structure (No = 200).	\$1,800,000
Telkaif	Large Structure (No = 335)	\$6,030,000
Total	No = 4290	\$56,340,000

* These include housing for Yezidis as well as ChaldoAssyrians.

** These include housing for Arab and Yezidis families as well as ChaldoAssyrians.

*** These include housing for Arab families as well as ChaldoAssyrians.

10. Education

No approach to redressing Iraq's education system can overlook how far it has declined. The United Nations and World Bank report in their October 2003 Joint Iraq Needs Assessment that:

“The education system in Iraq was widely regarded as one of the best in the Middle East until the 1980s. In the preceding years the country had made great progress at all levels of education and had achieved nearly universal primary enrollment by 1980. Thereafter, the system went into a steady decline driven by a combination of: (i) lack of resources, as public funds were siphoned off for military expenditures and other priorities of the ruling regime; and (ii) the politicization of the education system, which influenced everything from curriculum to teaching staff, to admissions policies.”¹³

The UN and WB report gives some insight into the state of the education system across the country and predominantly under Saddam Hussein's government. It does not robustly address the challenges facing ChaldoAssyrians in northern Iraq (from where they predominately originate) and in the Nineveh Plain specifically.

The policies of economic discrimination in northern Iraq effect ChaldoAssyrians and other minorities (i.e. Yezidis and Shabak) in the education sector as well. The TAL seeks to assure ChaldoAssyrians of their right to education. Nonetheless, without adequate representation in decision-making structures and transparent means of budget allocations it is not possible to identify the spending on education infrastructure development necessary in northern Iraqi towns where ChaldoAssyrians live.

Commissioned research in northern Iraqi towns shows that ChaldoAssyrians are in need of schools to realize their right to education and equitable development. Facilitating this will assist in realizing the overarching recommendation of the UN and WB, who stated, “Restoring the Iraq education system to the levels of the early 1980s must be at the heart of any reconstruction effort ... by improving the quality of its education system, the country would be developing the human and social capital it needs to develop a productive economy and cohesive society.”¹⁴ ChaldoAssyrians, a widely noted group with disproportionate human capital development, is being marginalized and leaving the country at alarming levels. Providing for their constitutional and right to a ChaldoAssyrian-based education will reverse this trend and secure an essential source of human capital for Iraq.

13. United Nations, World Bank [Joint Iraq Needs Assessment](#). October 2003. P. 14.

14. United Nations, World Bank [Joint Iraq Needs Assessment](#). October 2003. P. 14.

10.1 Primary and Secondary Education

The UN and WB report notes that, “of the approximately 13,000 primary and secondary schools, some 80 percent require significant reconstruction; and 700 of these need to be completely rebuilt.”¹⁵ This global picture affects ChaldoAssyrians and other minorities severely, but is compounded by the politico-economic challenges facing this ethno-religious group in northern Iraq. Table 8.1 provides insight into the extent of the infrastructural challenge facing ChaldoAssyrians and other minorities in realizing their right to equitable development and an education in their language.



1st year University student orientation in the Hamdaniya District, September 2004.

Operating on a unit cost of \$23,950.00 per classroom, minorities such as ChaldoAssyrians in northern Iraq require at least 33 new schools or rebuilt schools and 280 classrooms. There are also areas where minor repairs are needed on existing facilities. These are infrastructural developments essential to northern Iraqi minorities for realizing their right to an education, while concurrently ensuring their rights as minorities in the region.

Table 10.1 Primary and Secondary School Needs

Town/Village	Description	Cost
Alqush	School construction (12 rooms)	\$ 287,400
Bahzane**	School construction (10 rooms)	\$ 239,500
Bakhdeda	School construction (12 rooms)	\$ 287,400
Bandwaya	School construction (6 rooms)	\$ 143,700
Baqofa	School maintenance	\$ 9,925
Bartilla	School construction (12 rooms)	\$ 287,400
Bashiqa**/****	School construction (10 rooms)	\$ 239,500
Batnaya	School maintenance	\$ 9,900
Batnaya	School maintenance.	\$ 9,100
Batnaya	School construction (10 rooms)	\$ 239,500
Baweza*	School construction (8 rooms)	\$ 191,600
Beban**	School construction (6 rooms)	\$ 143,700

15. United Nations, World Bank Joint Iraq Needs Assessment. October 2003. P. 14.

Table 10.1 Continued

Town/Village	Description	Cost
Berozawa	School construction (8 rooms)	\$ 191,600
Bozan**	School construction (6 rooms)	\$ 143,700
Darawesh*	School construction (10 rooms)	\$ 239,500
Derston****	School construction (8 rooms)	\$ 191,600
Doghat**	School construction (6 rooms)	\$ 143,700
Fadhlyia*	School construction (8 rooms)	\$ 191,600
Hasan shame****	School construction (10 rooms)	\$ 239,500
Jambor**	School construction (6 rooms)	\$ 143,700
Kafrok****	School construction (6 rooms)	\$ 143,700
Karamles	School construction (12 rooms)	\$ 287,400
Karkasha*	School construction (8 rooms)	\$ 191,600
Karkhosh****	School construction (8 rooms)	\$ 191,600
Kharabat sultan*	School construction (6 rooms)	\$ 143,700
Mergy	School construction (8 rooms)	\$ 191,600
Sada*	School construction (8 rooms)	\$ 191,600
Sareshka**	School construction (8 rooms)	\$ 191,600
Shaqole*	School construction (10 rooms)	\$ 359,250
Sharafiya	School construction (10 rooms)	\$ 239,500
Shekh amer*	School construction (8 rooms)	\$ 191,600
Shekhka**	School construction (6 rooms)	\$ 143,700
Talseen****	School construction (8 rooms)	\$ 191,600
Telesqof	School maintenance in Telsqof	\$ 20,440
Telesqof	School construction (8 rooms)	\$ 191,600
Telkaif****	School construction (10 rooms)	\$ 239,500
Teskhrab kaber***	School construction (8 rooms)	\$ 191,600
Total (1)	Schools (33); Classrooms (280)	\$ 6,875,115

Note: Spending on school maintenance is excluded from the totals. There are four maintenance projects listed at a value of \$49,365.00.

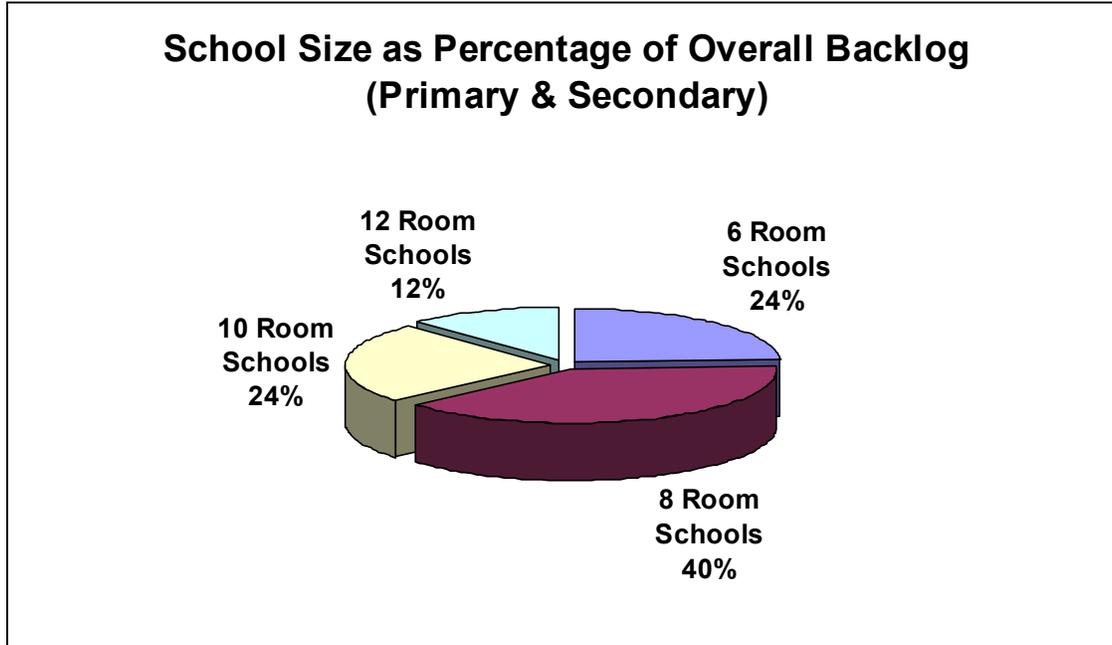
* The Shabak minority is a beneficiary of these projects.

** The Yezidis minority is a beneficiary of these projects.

*** The Turkmen minority is a beneficiary of this project.

**** The Arab minority is a beneficiary of these projects.

Graph 10.1 Percentage Breakdown of Schools by Size



10.2 Tertiary and Technical Colleges

Tertiary education development is an investment that provides a more immediate return on the investment. University students are ready to join the workforce within a short time-frame relative to other tiers of education and provide the greatest amount of expertise and skills to the economy. The pressing social, economic and political challenges facing Iraqi society demand an extraordinary focus on maximizing the potential contributions to be made by university graduates in the next 0-3 year medium-term expenditure framework.

In the area around Mosul (which has the second largest university in the country), ChaldoAssyrians and other minorities are unable to attend university due to a litany of threats and pressures directed at them for both religious and ethnic reasons. Building a University of Mosul Campus in Bakhdeda (of the Nineveh Plain) will not only establish a viable tertiary education facility, but provide within a very short timeframe an opportunity for over 1500 students to recommence their studies. Security and economic factors are presently preventing this significant number of university students from completing their education. This project is more fully elaborated in an explicit proposal found in Appendix 1. Please refer to the attached document.

ChaldoAssyrians are perhaps most widely known for their contributions to civilization arising

from the Near East, and also for their language. As the last known community to use Aramaic, they are unwittingly the guardians of a dynamic language that was elemental to the spread of Christianity; indeed, often referred to as the ‘language of Christ’. Two language institutes are proposed for development in two areas of the Nineveh Plain – the geographic heartland of the ChaldoAssyrians. These institutes will provide a sustainable basis for nurturing the language and overcoming the setbacks it has seen as a result of longstanding Arabization policies and Kurdification in more recent years.

Table 10.2 Tertiary and Special School Development

Town/Village	Description	Cost
Bakhdeda	Construction of Assyrian Languages Institute.	\$ 2,000,000
Bakhdeda	University of Mosul Campus	\$ 24,800,000
Telkaif	Construction of Assyrian Languages Institute	\$ 2,000,000
Total (2)	Institutes (2); University Campus (1)	\$ 28,800,000

In addition to the raw capital investments needed for ChaldoAssyrians in the area of education, are current costs related to transportation. Presently, transportation sources do not meet demand and adversely impact on students unable to get to school (at all levels of education). For this reason, the provision of buses is vital for maximizing school attendance and ensuring the development of Iraq’s youth through education. Table 8.3 provides a breakdown of the transport vehicle needs for northern Iraqi minorities.

Table 10.3 Transportation Needs in northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Sifni*	Student transportation.	\$ 20,000
Alqush	Student transportation.	\$ 20,000
Bakhdeda	Student transportation.	\$ 60,000
Baqofa	Student transportation.	\$ 10,000
Bartilla	Student transportation.	\$ 30,000
Batnaya	Student transportation.	\$ 10,000
Berozawa	Student transportation.	\$ 10,000
Karamles	Student transportation.	\$ 20,000
Sharafiya	Student transportation.	\$ 10,000
Telesqof	Student transportation.	\$ 30,000
Telkaif**	Student transportation.	\$ 30,000
Total		\$ 250,000

* The Yezidis minority is a beneficiary of these projects.

** The Arab minority is a beneficiary of these projects.

11 Healthcare

The former Minister of Health for Iraq provides a general synopsis of the situation in the health care sector in Iraq. Former Minister Khudair Abbas states that shifting budget priorities (widely acknowledged as politically driven) and overall mismanagement produced a situation whereby, *inter alia*, health indicators saw a marked decline¹⁶, the health professionals skills base is relatively low, and that there is a significant imbalance between the population, its needs and facilities.¹⁷



The UN and WB research emphasizes the importance of shifting the budget imperative away from the “hospital-oriented, capital-intensive model that requires large-scale imports of medicines, medical equipment and even health workers.”¹⁸ Indeed, of all the urgent health facility-development proposals put forth here, only 2 of 20 are for medium-sized hospitals for relatively major population centers.

The collation of needs for northern Iraq in minority areas that are not being prioritized by the present authorities reinforces the finding of the UN and WB. The towns and villages of ChaldoAssyrians, and others such as Yezidis, Shabak, Turkmen and Arabs principally require primary medical health care clinics. It is upon preventative and primary health care that these communities can realize a standard level of health and thereby focus on the development of their communities. Health care is an essential ingredient to realizing the development potential of a society.

The field teams compiling the work for the ISDP provide the following projects for immediate implementation:

-
16. The World Health Organization has consistently noted the marked decline in Iraq health care indicators. Furthermore, other NGOs, such as MedAct have noted the state of Iraq’s health sector as being grossly insufficient for pressing health demands. http://www.who.int/features/2003/iraq/briefings/iraq_briefing_note/en/index2.html; http://www.medact.org/content/wmd_and_conflict/Medact%20Iraq%202004.pdf
 17. Abbas, Khudair. Presentation to Keck Center for National Academics – IOM. August 12, 2004. <http://www.iom.edu/Object.File/Master/21/796/0.pdf> (accessed April 3, 2005).
 18. United Nations, World Bank Joint Iraq Needs Assessment. October 2003. P. 17.

Table 11.1 Medical Facilities Needs in Northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ali rash*	Clinic	\$ 150,000
Badana Kaber*	Clinic	\$ 150,000
Bahzane**	Clinic	\$ 150,000
Bakhdeda	Hospital	\$ 2,500,000
Baqofa	Clinic	\$ 150,000
Bartilla	Clinic	\$ 150,000
Batnaya	Clinic	\$ 150,000
Baweza*	Clinic	\$ 150,000
Beban**	Clinic	\$ 150,000
Berozawa	Clinic	\$ 150,000
Darawesh*	Clinic	\$ 150,000
Jambor	Clinic	\$ 150,000
Kane sheren****	Clinic	\$ 150,000
Karamles	Clinic	\$ 150,000
Karamles	Pharmacy	\$ 14,700
Kharabat sultan*	Clinic	\$ 150,000
Masqalat****	Clinic	\$ 150,000
Mergy	Pharmacy	\$ 14,700
Shaqole*	Clinic	\$ 150,000
Sharafiya	Clinic	\$ 150,000
Talseen****	Clinic	\$ 150,000
Telesqof	Clinic	\$ 150,000
Telkaif****	Hospital	\$ 2,500,000
Teskhrab kaber***	Clinic	\$ 150,000
Total	Clinics (20); Pharmacies (2); Hospitals (2)	\$ 8,029,400

* The Shabak minority is a beneficiary of these projects.

** The Yezidis minority is a beneficiary of these projects.

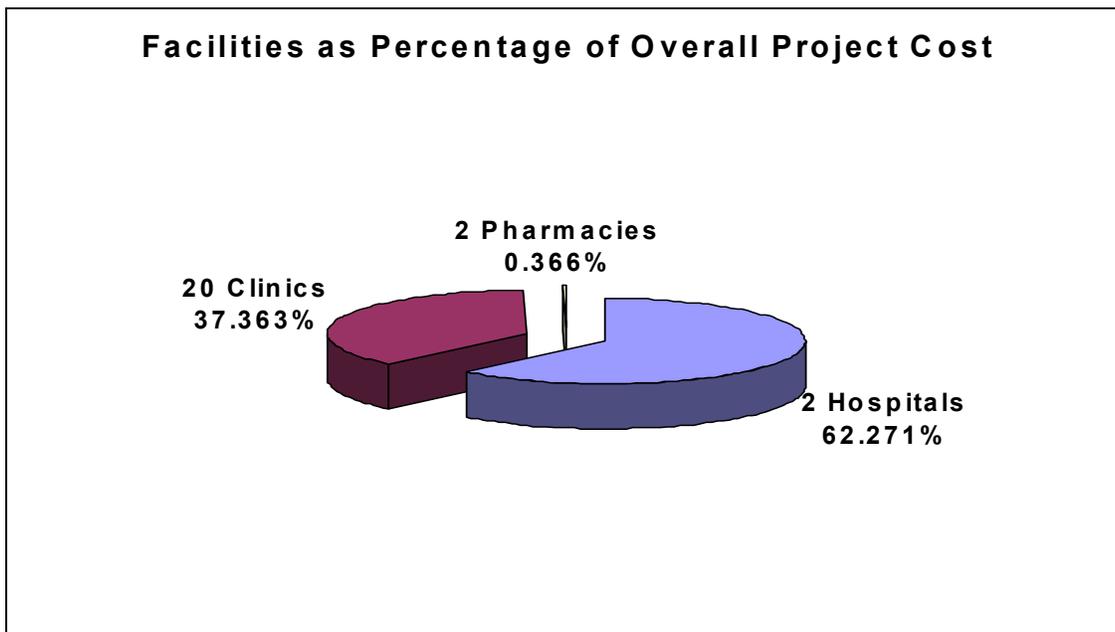
*** The Turkmen minority is a beneficiary of this project.

**** The Arab minority is a beneficiary of these projects.

Out of 24 facilities, 2 are for hospitals and 2 are for pharmacies. This will bring into effect policies around primary health care, of which these towns are in critical need either as a result of dilapidated existing facilities or the non-existence of any appropriate facilities.

Hospitals are slotted for major towns that presently do not have an adequate facility commensurate to their needs – affirming the views of the former Minister of Health cited above. Bakhdeda and Telkaif are significant population centers nominally speaking and are major populations centers for ethno-religious minorities such as ChaldoAssyrians. The non-responsiveness of the Kurdish Regional Government and the Baghdad government to the needs of these communities perpetuates a situation of poor health.

Chart 11.1 Health Care Facilities as Percentage of Total Project Cost



12. Water and Sanitation

Water supply in Iraq is widely varied and largely dependent on whether a location is urban or rural. The former areas had 92 per cent coverage by 2000. The latter had 46 percent coverage in the same time period. Also, a marked decline in overall water supply is noted. The measures for per capita water supply indicate a drop by more than half in numerous areas.¹⁹

The connection between water supply and health is also a pressing problem. Unsafe water supplies and insufficient sanitation are a principal health risk for many in northern Iraq. The backlog is a nation-wide challenge, however. USAID reports that Iraq was able to generate 3 million cubic meters a day before the liberation of Iraq. By June of 2004, this amount dropped to 65 percent of that level, or 1,950,000 cubic meters “primarily due to years of neglect, electricity shortages and post-war looting of plant and emergency generators.”²⁰



Typical streets in the Telkaif and Hamdaniya district of Nineveh, Iraq. Lack of adequate sewage treatment and sanitation systems make the areas vulnerable to epidemic of diseases such as Cholera, typhoid, polio, meningitis, and hepatitis.

Infant mortality rates in Iraq are estimated to be 108 deaths per 1,000 children born, higher than any country outside of sub-Saharan Africa and nearly three times the Arab countries' average of 44 per 1,000. The Ministry of Health has estimated that 40% of the children attending health centers now suffer from gastrointestinal diseases, the main cause of which is a lack of access to potable water and the unsanitary disposal of wastewater and sewerage.

19. United Nations, World Bank Joint Iraq Needs Assessment. October 2003. P. 21.

20. Chatila Publishing House, “World’s Gateway to MENA Water-Related Industries” http://www.chatilapublishing.com/thirdtemp.cfm?levelthreecat_id=6&leveltwocat_id=4 (accessed April 15, 2005).

The execution of the water projects will increase the amount of safe and reliable potable water distributed to the target towns and villages and in the process reducing the amount of brackish water that is carrying contagious water borne diseases. The project duration for immediate impact is 12 months. The project will consist of a combination of rehabilitation of existing facilities and new construction to accommodate the shortage of potable water.

Minority communities in northern Iraq are enduring through inadequate water supply levels in an inordinate number of towns and villages. 21 towns and villages lack the appropriate water infrastructure to ensure a better and safer supply. The impact in these communities is tangible with reports coming from field researchers on communities going without water for upwards of 3 days in a stretch. It is essential to have the projects listed here undertaken immediately as they represent the most pressing needs in the water-related infrastructural backlog.

Sanitation presents a greater challenge overall for Iraq. Ground research reflects this pressing reality with three-fourths of the projects just related to developing sewerage systems. The UN and WB report that “only 9 percent of the urban population outside of Baghdad is served by sewage systems while the rural areas and the north of Iraq do not have piped sewerage systems.”²¹ The matter of sewage overlays with water supply particularly with respect to water safety and disease levels. Hospitals are also extremely vulnerable and measures to ensure better sanitation will impact on health indicators directly.

At the moment there is only a very limited sewage distribution network and minimal treatment in Iraq as a whole country and what there is, is in very poor condition. Most of the waste water runs into shallow channels or in some cases directly into the rivers and lakes. When rain falls the heavily polluted water runs into house yards and causes very high levels of gastro intestinal diseases. The large amounts of surface water also create a haven for mosquito larvae and consequently there is a high potential for malaria and dengue fever.

The execution of the sewerage projects will provide a collection system for both storm and foul networks. The project duration for immediate impact is 12 months. The project will consist of a combination of rehabilitation of the limited existing treatment facilities and new construction to accommodate the sanitary strains. The treatment plants will be constructed to the standard guidelines and specifications to ensure that the environment and society are protected and to eliminate the diseases.

Table 12.1 Water Supply Needs in northern Iraqi Towns and Villages

Town/ Village	Description	Cost
Ain Sifni**	Water supply network (L=9 KM)	\$ 900,000
Ali rash*	Water supply unit	\$ 65,000
Alqush	Water supply network (L=10 KM)	\$ 1,000,000
Bakhdeda	Water supply project in Bakhdeda-karamles –Barttila	\$ 4,000,000
Bakhdeda	Water supply network (L=20 KM)	\$ 2,000,000
Bartilla	Water supply network (L=11 KM)	\$ 1,100,000
Bashiq**/**	Water supply network (L=10 KM)	\$ 1,000,000
Beban**	Water supply net construction.	\$ 50,000
Bozan**	Electricity supply to well	\$ 30,000
Bozan**	Repair of the well	\$ 20,000
Derston***	Water supply unit	\$ 500,000
Doghat**	Water supply unit	\$ 400,000
Kafrok***	Water supply unit	\$ 120,000
Karamles	Water supply network (L=7 KM)	\$ 700,000
Magara	Well development	\$ 50,000
Masqalat***	Water supply unit	\$ 75,000
Mergy	Maintenance of water project in Mergy	\$ 80,000
Sareshka**	Water supply unit	\$ 400,000
Shekhka**	Well development	\$ 50,000
Talseen***	Water net construction	\$ 95,000
Tarajala*	Water supply unit	\$ 400,000
Telesqof	Water supply network (L=8 KM)	\$ 800,000
Telkaif****	Water supply project in Telkeif-Batnaya-Alqush-Tellsqof-Baqofa-Sharafia-Jambor	\$ 4,000,000
Telkaif***	Water supply network (L=10 KM)	\$ 1,000,000
Total		\$18,835,000

* The Shabak minority is a beneficiary of these projects.

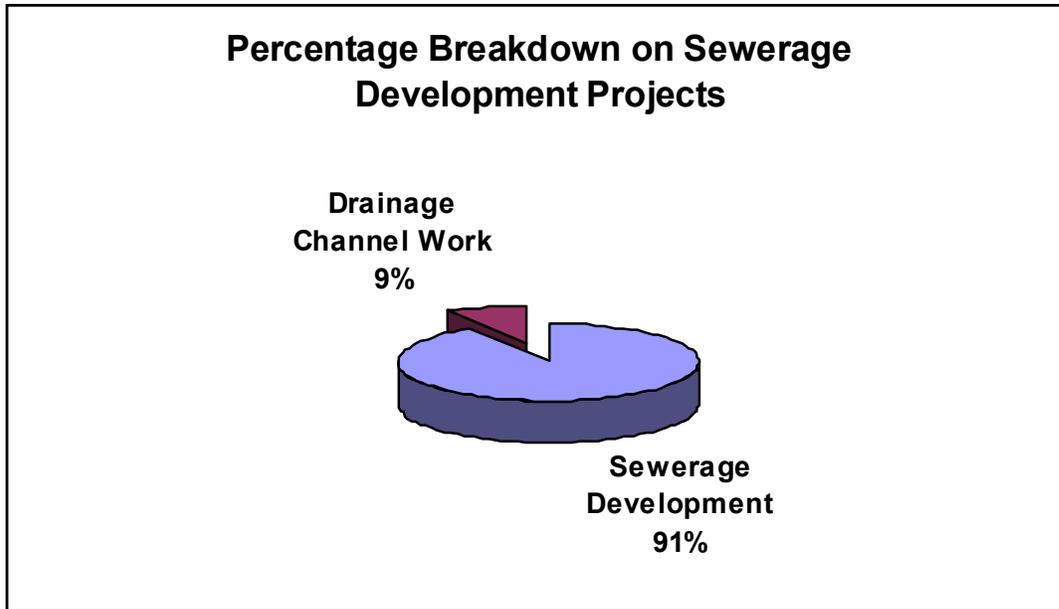
** The Yezidis minority is a beneficiary of these projects.

*** The Arab minority is a beneficiary of these projects.

An affirmation of the UN and WB report on the absence of sewerage systems in the north is born out by the fact that 91 percent of the proposed funding for sewerage-related development is connected to developing sewerage systems where none presently exist as identified by the organizations and experts liaising with the ISDP in developing the project

proposals (see Table 12.2.).

Chart 12.1 Basic Sewerage Development as Main Cost Driver



21. United Nations, World Bank Joint Iraq Needs Assessment. October 2003. P. 21.

Table 12.2 Sewage Systems Needs in northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Sifni	Aien sifne sewerage project (2 km.).	\$ 2,000,000
Alqush	Complement of Alqush sewerage drainage rainwater.	\$ 141,750
Alqush	Alqush sewerage project (2 km.).	\$ 2,000,000
Bakhdeda	Bakhdeda sewerage project (4 km.).	\$ 4,000,000
Bakhdeda	Construction of rainwater drainage channel lined by the concrete (1.5 km.).	\$ 1,192,750
Bartilla	Bartilla sewerage project (3 km.).	\$ 3,000,000
Bashiqqa	Basheqa sewerage project (2 km.).	\$ 2,000,000
Batnaya	Batnaya sewerage project (1 km.).	\$ 1,000,000
Karamles	Karamles sewerage project. (1 km.)	\$ 1,000,000
Telesqof	Cleaning up of Sewerage to drainage rainwater.	\$ 6,000
Telesqof	Construction of rainwater drainage channel lined by the concrete.	\$ 414,850
Telkaif	Telkeif sewerage project (3 km.).	\$ 3,000,000
Total		\$ 19,755,350

* The Yezidis minority is a beneficiary of these projects.

** The Arab minority is a beneficiary of this project.

Across 8 towns and villages, there is a need for over 50 kilometers of sewerage. Table 10.2 represents the first and most pressing needs and must eventually be rolled-out to other areas with infrastructure in need of repair. Two of these areas, Bakhdeda and Telkaif, are major population centers. The absence of proper sewerage is a major health risk and must be seen in the context of sustainable community development. The politics of economic discrimination being felt by minorities like ChaldoAssyrians is most explicit when these communities see others receiving these essential services at their expense.

It is widely understood that the major sewerage challenges in Iraq are around the Baghdad area. It accounts for the bulk of contamination getting into the water supply. The scope of the situation in northern Iraq is relative to the communities at risk. These projects are essential to relatively small communities, but ones that represent a significant proportion of Iraq's minorities in northern Iraq. Health risks and the general despair created from not benefiting commensurately from liberation as are other towns, is a push factor in the flight of groups like ChaldoAssyrians to Syria and Jordan.

13. Electricity

Electricity is an essential service that cannot be understated, water supply is dependent on it and so is private sector economic development and matters of safety and security. Electricity supply needs in northern Iraq for minorities is not as pressing a challenge as in other areas of Iraq in that measurement of needs by the number of towns and villages does not produce a high number. Where there are gaps, however, the challenges have significant stifling effects on the particular communities. Field research and observations made by the ISDP's Washington-based team revealed that electricity supply led to some of the following phenomena:

- **Safety:** The absence of a reliable electricity grid assisted in the targeting of minorities by elements within the Peshmerga and by Islamic extremists. This is evidenced in the ambush of Hazim Damman (see Section 6). Travel at night in the vicinity of these major towns is constrained by the absence of electricity.
- **Political:** In the northern Iraqi town of Zakho, daytime power-cuts to specifically ChaldoAssyrian areas constitute a pattern of intimidation and the denial of equality. Actions such as this are facilitated by the absence of adequate generators and are designed to create an emigration 'push factor'.

The following electricity-related needs are essential while a further review is conducted to define further electrification demands in vulnerable northern Iraqi minority towns:

Table 13.1 Electrification Needs in northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Baqri	Supply a generator for Ain baqri.	\$ 10,750
Doghat**	build of electric network.	\$ 500,000
Fadhlyia *	Supply a generator (two generator)	\$ 21,500
Jambor	Supply a generator for Jambor.	\$ 10,750
Magara	Supply a generator.	\$ 10,750
Mergy	Supply a generator for Mergy village.	\$ 10,750
Telesqof	Maintenance of electric network in Telsqof.	\$ 43,055
Total		\$ 607,555

* The Shabak minority is a beneficiary of these projects.

** The Yezidis minority is a beneficiary of this project.

The main project is developing an electricity network in the Yezidis town of Doghat, which constitutes 82 percent of the project cost. Except for the maintenance work required in Telesqof, the main item required in the towns and villages presently is generators.

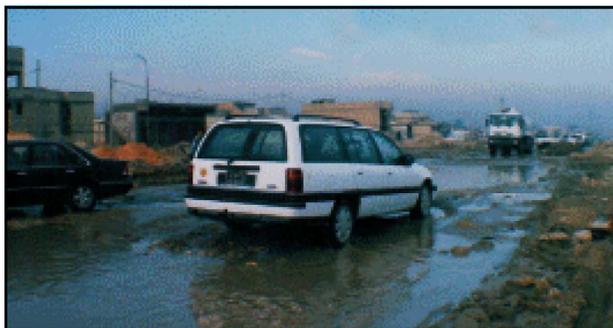
14 Transport

Road development and maintenance during Ba'athist governance is widely acknowledged as being one of gross neglect. The emphasis of the regime was on maximizing infrastructure investment on the basis of politically-driven ethnic and religious concerns. Sunni Arab communities benefited in significant disproportion to the rest of Iraq's peoples, including ChaldoAssyrians. In northern Iraq, specifically the three governorates under formal Kurdish control, this trend is being reversed. Redress for Iraq's Kurdish people is important, as it is for the dominant Shi'a majority, which endured the greatest hardships under Saddam Hussein. Unfortunately, the trend of preferential treatment or, economic discrimination, persists in northern Iraq only now the direction is preferential treatment for northern Iraq's Kurdish communities at the expense of other minorities such as ChaldoAssyrians, Shabak, Turkmen, Yezidis, and other Arabs.

Roads development and maintenance is a profound indicator of this reality. Road infrastructure going to Kurdish communities is unfolding at an exponential rate in comparison to northern Iraq's minority communities.

Roads construction work in these minority communities demands a wide array of development and servicing as a result of decades of mismanagement and neglect, and subsequent economic discrimination under Kurdish Authority decision-making. In the tables that follow, the description "road construction" per line item constitutes development of temporary dirt roads simply to begin generating access for communities, developing new roads (predominantly using asphalt but at times concrete), expansion to allow some parity between supply and the high demand in the communities, re-paving of existing roads and other basic maintenance functions, proper signage and lastly, lighting. The standard design for this type of road includes 10cm of bituminous asphalt placed over 25cm of compacted sub-base. The roads will have two traffic lanes, each lane being 3.25 meters wide and 1.5 meter shoulders.

It is worth noting that items such as road lighting are of critical concern to these northern



Roads in the Nineveh plain towns are among the most neglected in all of Northern Iraq causing significant financial burden on the locals in personally maintaining the roads and their vehicles.

Iraqi communities. The safety of roads is in an abysmal state due to inadequate lighting and these communities remain vulnerable to brigands and northern Iraqi warlord factions (such as those elements within the KDP) by having to use unlit roads in the evenings.

The economic consequences of unlit roads are also of immediate concern to these northern Iraqi communities. Transport vehicles essential for overnight business are unable to operate without undue risk. This generates an opportunity cost in operations, limiting the realization of the private sector's full potential in these communities. Costs are not only borne by businesspersons reliant on transportation networks, but also regular citizens whose vehicles incur inordinate maintenance costs. The reoccurrence of repairs to vehicles in regular use in some of these communities are reaching weekly levels per vehicle. This constrains the budget of individual households and limits more robust spending on other consumables in the local economies by vehicle owners.

Again, these circumstances are a key source of the emigration crisis that is manifesting among northern Iraqi minorities such as ChaldoAssyrians. The difference in roads development is stark when Kurdish towns are contrasted with governmental investment in the roads of the communities listed in Table 12.1.

Table 14.1 Roads Development Needs in northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Baqri	Road construction .	\$ 167,920
Ain Sifni**	Road pavement in Ain sifny. (6 km).	\$ 303,000
Alqush	Construction of an asphalt road in Alqush.	\$ 281,900
Alqush	Construction of a concrete road in Alqush.	\$ 179,000
Bahzane**	Road pavement in Bashiqa & Bahzane.	\$ 680,000
Bakhdeda	Construction of an asphalt road in Bakhdeda.	\$ 1,450,000
Bakhdeda	Road pavement from Bakhdeda to Karamlis (6 km)	\$ 378,000
Bakhdeda	Road construction in length (25 km).from Bakhdeda to Mosul in direction of Ali rash village.	\$ 2,470,000
Bandwaya	Road construction of Alqush-Bendwaia. (8 km).	\$ 550,000
Baqofa	Construction of an asphalt road in Baqofa.	\$ 77,000
Baqofa	Construction of a concrete road in Baqofa.	\$ 59,750
Bartilla	Road pavement in Bartilla.	\$ 290,000
Batnaya	Construction of a road for Saint Abraham Abbey.	\$ 127,000
Batnaya	Construction of an asphalt road in Batnaya.	\$ 282,400
Batnaya	Construction of a concrete road in Batnaya.	\$ 119,500

Table 14.1 Continued

Town/Village	Description	Cost
Baweza*	Road construction in length (4km). Between Sada & Baweza	\$ 270,000
Beban**	Road construction in length (1 km).	\$ 120,000
Berozawa	Road construction .	\$ 305,000
Darawesh*	Road construction in length (3 km).	\$ 175,000
Dashqutan	Road construction .	\$ 226,350
Derston****	Road construction in length (4km).	\$ 480,000
Fadhlyia*	Road construction in length (2 km).	\$ 240,000
Hasan shame****	Road construction in length (3km).	\$ 285,000
Kafrok****	Road construction in length (4 km). Kafrok – Batnaya	\$ 465,000
Kane sheren****	Road construction in length (2 km). Kane sherenkrasheq—Filfel	\$ 240,000
Karamles	Road pavement in Karamlis.	\$ 780,000
Karanjok	Road construction .	\$ 105,700
Karkhosh****	Road construction in length (4km). Ronak& karkhosh camp	\$ 375,000
Kharabat sultan*	Road construction in length (1 km).	\$ 135,000
Masqalat****	Road construction in length (4km). Masqalat –Telesqof	\$ 455,000
Mergy	Road pavement of Mergy.	\$ 71,500
Sareshka**	Road construction in length (4 km).	\$ 430,000
Shekhka**	Road construction in length (1 km).	\$ 120,000
Talseen****	Road construction in length (4km).	\$ 445,000
Telesqof	Construction of an asphalt road in Tellsqof.	\$ 267,000
Telesqof	Construction of a concrete road in Tellsqof.	\$ 350,000
Telkaif****	Road pavement in Telkeif.	\$ 1,150,000
Telkaif****	Road pavement of Telkeif-Alqush. (In width 12 M with Sub-roads).	\$ 6,450,000
Teskrabkaber***	Road construction in length (1 km).	\$ 120,000
Total		\$ 21,476,020

* The Shabak minority is a beneficiary of these projects.

** The Yezidis minority is a beneficiary of these projects.

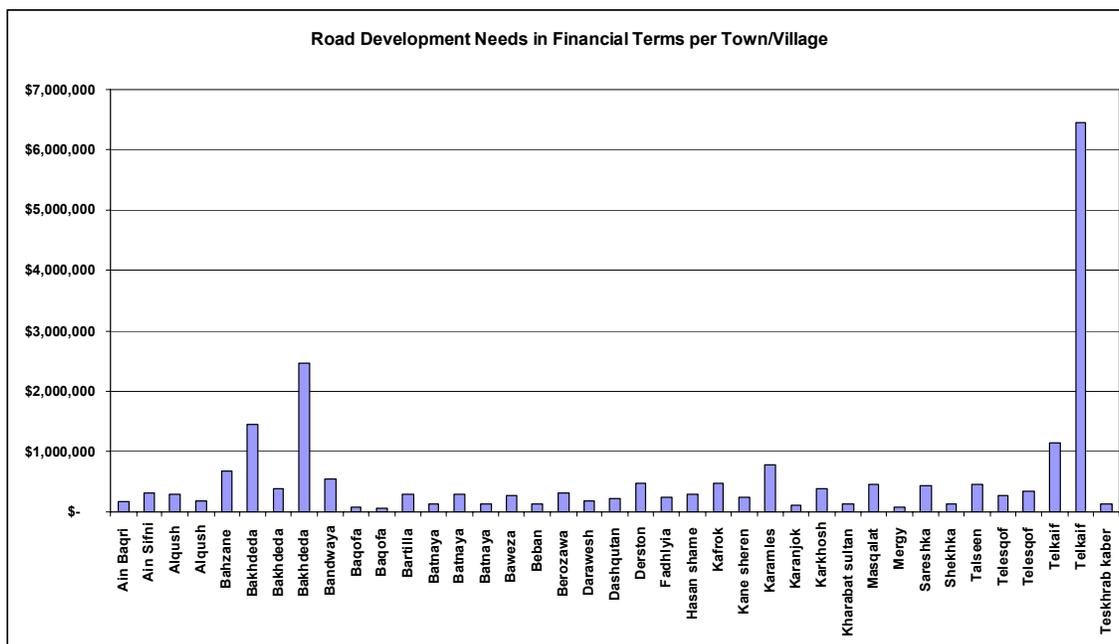
*** The Turkmen minority is a beneficiary of this project.

**** The Arab minority is a beneficiary of these projects.

It is clear that the major population centers of Bakhdeda and Telkaif are slated to receive the highest proportion of the funding. This is a needs-based reality. Chart 12.2 demonstrates that if these two statistical outliers are removed, there is a high degree of equitable development for all of these communities, and across the total array of minorities (Shabak, Yezidis, Turkmen, Arab and ChaldoAssyrian).

A majority of the proposed projects are driven by demand that is also linked to pressing private sector economic development needs. The constraints on business development are a daily reality. Agribusiness potential and local manufacturers are unable to maximize their potential due to lack of road access or reliable road access to meet consumer demand. These road development projects will tap into ChaldoAssyrian communities known for their human capital assets that are presently underutilized as a result of poor roads infrastructure. The long term outcome (already starting to manifest over the last 10 years in northern Iraq), is a pattern of inequitable socio-economic development.

Chart 14.1 Road Construction Needs of northern Iraqi Towns and Villages



It is also important to appreciate the spin-off potential from these investments. These communities still exist and manage to survive despite the odds against them arising from Ba’ath era policies and the lack of concern of non-ChaldoAssyrian authorities in the post-liberation period. Given the safe assumption that they are “under-developed”, the initial roads investment is likely to trigger positive spin-offs spurring community expansion. This understanding is built into the projections for roads development in the various communities (and particularly in those areas linking as yet inaccessible towns and villages).

15. Agriculture

Perhaps the most underdeveloped sector of northern Iraq is agribusiness. This sector is widely understood to be a vital element in Iraq's socio-economic transition. The UN and WB together make the point very clearly:

*"Agriculture currently provides about 8 percent of Iraq's GDP and 20 percent of employment and supports a rural population of 7 million people. The sector has declined since the 1980s and is underperforming. Over the last fifteen years, agricultural production dropped by an average of 1.1 percent per year, and per capita agricultural production declined by about 3.9 percent per year. Productivity of the main cereal crops—wheat, barley and rice—has fallen dramatically. Over half of the country's total food requirement is imported ...[Over] 50 percent of the population remained vulnerable to food insecurity."*²²

It is fundamental to appreciate that employment creation is seen as a necessity for Iraq. A young, unemployed population is a basic factor in developing fertile ground for societal discontent and exploitation by insurgents and warlord factions recruiting minorities who agree to "Kurdification" and terrorist activities targeting minorities on ethnic and religious grounds.

Simply put, "given the right support and policy environment, Iraq's agriculture sector could contribute significantly to economic growth and job creation," and stability²³. To realize this potential, it is important to recognize the interdependence of this sector with the abovementioned sectors: water, electrification, roads, etc. In addition, the Mosul Campus project slotted for development in Bakhdeda (also contained as part of this Needs Assessment and attached to this document) is important for developing the human capital to revitalize and then optimize the place of agriculture in Iraq's economic recovery. Therefore, it is vital for decision-makers to appreciate the need for seeing the Campus Development project in the Nineveh Plain as an element interwoven with realizing gains in numerous sectors, including agriculture.

22. United Nations, World Bank [Joint Iraq Needs Assessment](#). October 2003. P. 36.

23. United Nations, World Bank [Joint Iraq Needs Assessment](#). October 2003. P. 36.

There is a two-pronged initial approach for agriculture development proposed here. The first is to simply provide proper irrigation and agribusiness capital development. The second involves establishing agribusiness centers with satellite farms developing on adjacent land. These two are dealt with respectively below.

Table 15.1 Agriculture Needs in northern Iraqi Towns and Villages

Town/Village	Description		Cost
Ain Sifni*	Supply reaping machine model 2005 (NO.10)	\$	800,000
Alqush	Distribution of Manure in Alqush.	\$	85,000
Alqush	Supply reaping machine model 2005 (NO.10)	\$	800,000
Bakhdeda	Supply reaping machine model 2005 (NO.20)	\$	1,600,000
Bandwaya	Construction concrete Irrigations channel in Bendwaia (Length 4000 m).	\$	198,500
Baqofa	Supply reaping machine model 2005 (NO.5)	\$	400,000
Bartilla	Distribution of Manure in Bartilla.	\$	150,000
Bartilla	Supply reaping machine model 2005 (NO.10)	\$	800,000
Karamles	Supply reaping machine model 2005 (NO.5)	\$	400,000
Karamles	Construction concrete Irrigations channel in Karmles (Length 4000 m).	\$	198,500
Karamles	Construction of walkways in Karmles.	\$	10,000
Sharafiya	Construction of walkways in Sharafia.	\$	4,000
Sharafiya	Distribution of Manure in Sharafia.	\$	14,500
Telesqof	Supply reaping machine model 2005 (NO.10)	\$	800,000
Telkaif**	Supply reaping machine model 2005 (NO.15)	\$	1,200,000
Total		\$	7,460,500

* The Yezidis minority is a beneficiary of these projects.

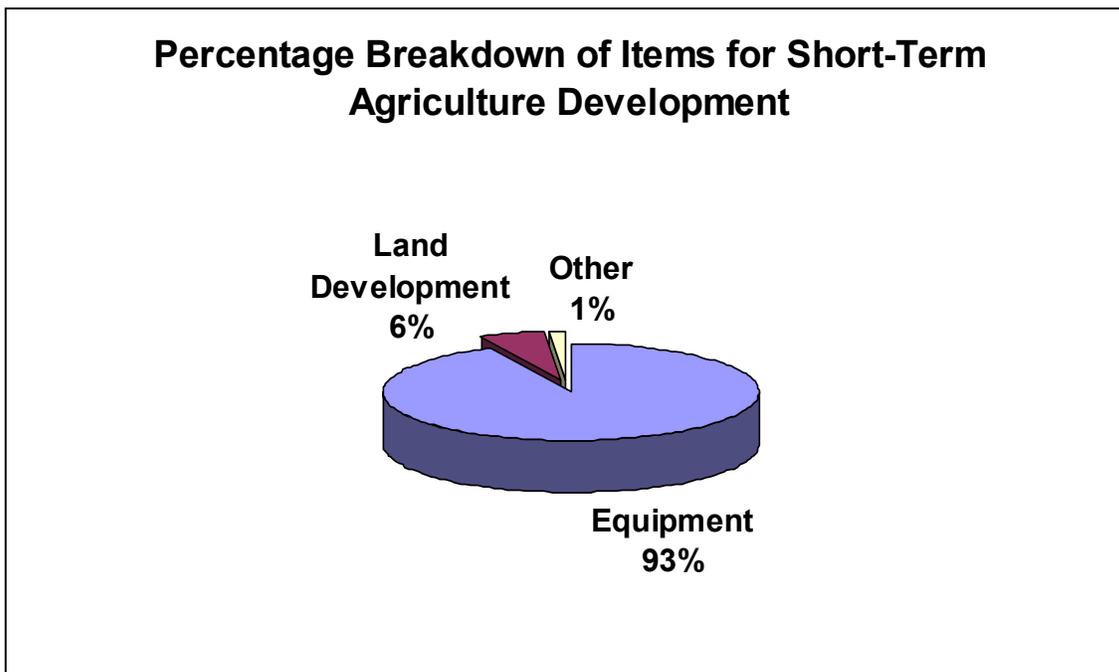
** The Arab minority is a beneficiary of these projects.

Once again, equitable development is a principal imbibed throughout the approach of this ISDP research effort. It is worth noting that approximately 27 percent of the monies proposed here go to communities with significant Yezidis and Arab communities. This is essential for the sustainability of the transition and to demonstrate to Kurdish authorities the necessity of equitable development.

In terms of the breakdown of costs, it is worth noting that presently, the emphasis is on overcoming the capital equipment gaps. These are presently preventing a more robust agribusiness sector from emerging in these communities and thereby stifling overall economic

development. It also means, for policy-makers and development experts, that minor financial investments on manufactured goods (such as reaping machines) can allow for almost immediate return on investment. The delays are simply in the areas of procurement and delivery. If the goods can be delivered on time for seasonally-driven crops, farmers and landowners can begin to see growth within an extremely short timeframe. This is evidenced in Chart 13.1 below.

Chart 15.1 Capital Equipment a Principal Need for northern Iraqi Agriculture



The second area for agriculture development involves establishing a model and satellite farm network that can begin to capitalize on existing, underutilized farming and agribusiness expertise and emerging agronomy and agriculture students.

Four towns—Alqush, Bakhdeda, Telkaif, and Barttila—have suitable farmland and willing owners for major agricultural development and are identified as places appropriate for initial investment in major agribusiness development. The conception here is to use the existing stock of farming and agribusiness human capital for developing and managing four “Model” farms of substantial size (not less than 1000 acres). These farms will in turn serve as major employment centers for underdeveloped farms, unemployed farmers/laborers and

agribusiness students. Remuneration for the services of these individuals will be discounted to allow them to accrue savings for acquiring a satellite farm for themselves adjacent to the principal, 'Model' farm.

The first four 'Model' farms will be developed in two increments of 500 acres. This same principled approach applies to the development of the satellite farms vis-à-vis the staff.

It stands to reason that the feasibility of this endeavor is highly contingent upon infrastructural development in the three respective communities. This once again reinforces the importance of factoring the interdependence between economic development such as in agriculture to the basic infrastructure that is presently under-developed in many ChaldoAssyrian and other minority communities.

A 'Model' farm comprises an amalgamation of local farmers prepared to come together to gain the benefits of access to capital because once amalgamated, the 'Model' farm will serve as the purchasing agent for the whole enterprise allowing them to rent the major equipment they presently lack. It also ensures access to seeds, fertilizer, chemicals and other factor inputs of production. In this framework, the 'Model' farm will facilitate strategic management in terms of market development and access. The 'Model' farm will decide on crops for local consumption and those for export to known markets (particularly in Europe and to a lesser extent, Iraq and the Middle East).

Local government agencies will be established to lease the land from small farmers and bring them together into the 'Model' farm.

The satellite farms, starting as small as 20 acres each, will be operated by new agriculture students and farmers that have proven their ability in their work on the 'Model' farm. The staff will be incentivized to sacrifice short-term remuneration for the medium-term prospect of having an opportunity to manage their own farmland and, for farmers without a completed education or no education at all, the program offers subsidies towards a formal agriculture education.

The major benefit of this project is that should conditions and basic assumptions change, it can be abandoned at little cost as it is meant for incremental development. To the maximum

extent possible, debt financing is proposed with the idea that grant funds can be obtained to support the capacitation and studies necessary for the successful operation of the satellites.

Lastly, the impact on employment creation and maximizing the agribusiness potential is enhanced in that these major operations have cold storage, packaging, shipping and process management requirements, all of which can be filled by new or existing, underutilized staff.

Appendix 2 contains the full proposal.

16. Media

A key element of a vibrant democracy is a free press. It ensures that a variety of views are presented for public dialogue and debate. It also ensures robust social accountability that at times is lacking in formal governing institutions (especially in nascent structures such as Iraq's).

16.1 Local Newspapers

Local newspapers are a critical element in any local economy. They provide a medium of information exchange on business activity and economic opportunities in the area and across towns. Local newspapers do not exist in a great number of ChaldoAssyrian towns or in communities of other northern Iraqi minorities. Such publications provide business with platforms to market themselves, advertise jobs and for people to exchange goods.

Capital investment potential to launch such operations does not exist, as the Iraqi private sector is busily working on other essentials that are still missing.

Local newspapers also play a critical role in facilitating citizen awareness of local issues. This provides a vehicle for persons to appreciate political development at the local level and subsequently become active citizens in the political development of their communities. This also provides a local litmus test for democracy at the ground level in every town. For example, if a newspaper criticizes the local government for not being transparent or for not delivering basic services, the response of that government will provide insights into, inter alia, respect for freedom of speech, freedom of the press, transparency, and accountability.

The proposed operations cater for monthly printing and circulation levels, 4 staff members (an editor, 2 reporters and salesperson), the necessary hardware (computers, scanners, audio recorders, cameras and the software), and lastly transportation and distribution means (mainly a vehicle).

The following 10 towns require the capital injection to start local newspapers:

Town/Village	Description	Cost
Alqush	Printing, personnel, hardware and software, vehicle	\$ 24,800
Bakhdeda	Printing, personnel, hardware and software, vehicle	\$ 24,800
Bartilla	Printing, personnel, hardware and software, vehicle	\$ 24,800
Ba'qope	Printing, personnel, hardware and software, vehicle	\$ 24,800
Bashiqa	Printing, personnel, hardware and software, vehicle	\$ 24,800
Batnaya	Printing, personnel, hardware and software, vehicle	\$ 24,800
Karamles	Printing, personnel, hardware and software, vehicle	\$ 24,800
Sharafiya	Printing, personnel, hardware and software, vehicle	\$ 24,800
Telesqof	Printing, personnel, hardware and software, vehicle	\$ 24,800
Telkaif	Printing, personnel, hardware and software, vehicle	\$ 24,800
Total		\$ 248,000

16.1 Television Broadcasting

Iraq is noted for having a wide array of media but resources are a key determinant of each media source's reach. This reality ensures that ChaldoAssyrian broadcasting through Ashur TV is unable to reach the Iraqi public at a level commensurate with other northern Iraqi broadcasters disproportionately funded by Iraqi national and regional sources.



Ashur Tv station in Bakhdeda, Nineveh. The new facility has been built with the financial support of locals and donations from ChaldoAssyrian Iraqi compatriots.

ChaldoAssyrians have been dispersed throughout Iraq as a result of past and continued patterns of violence, intimidation and discrimination. This dislocation from their actual land and homes has the effect of eroding their ethno-religious identity by surrounding them with other majorities. Over long periods of time, this action has the impact of assimilating ChaldoAssyrians – something Saddam Hussein achieved with some degree of success.

In this environment, media sources such as Ashur TV – a ChaldoAssyrian broadcaster – play a vital role in offering all ChaldoAssyrians an opportunity to remain connected to the community as a whole. The programming for Ashur TV also provides a sound basis for developing civil society with news and educational programs, as well as entertainment that sustain cultural development. More importantly, it also runs general content programs for nation-wide viewership.



University students of fine arts volunteer to operate Ashur TV in the Nineveh Plain towns. Daily programming in Arabic and Syriac.

Regrettably, Ashur TV has tenuous access to resources and no access to the government directed resources benefiting other broadcasters preferred by regional government decision-makers on political grounds (a basis for decision-making reminiscent of Saddam Hussein's period of budget management and resource allocation).

Researcher produced the following requirements for Ashur TV:

Table 16.1 Ashur TV Capital and Current Expenditure Needs

Equipment	Television Station Departments						Total Units	Cost/Unit	Total
	Production	Broadcast	Archives & Editing	Programming	Remote Crew	Station Studio			
AV mixer	1					1	\$ 6,000	\$ 12,000	
Audio Mixer	1	1				2	\$ 600	\$ 1,200	
Production Videoe player	4					2	\$ 600	\$ 3,600	
DVCAM Player	2	2	1	1		8	\$ 3,500	\$ 28,000	
TV monitor	6	4	2	4	2	22	\$ 100	\$ 2,200	
Title generator	1	1				2	\$ 600	\$ 1,200	
Computer w/video capture card	1		1			3	\$ 1,000	\$ 3,000	
Computer Printer			1			2	\$ 200	\$ 400	
Camcorder (DVCAM)					4	3	\$ 3,500	\$ 24,500	
HDV Camcorder (Sony HDV VTR)						1	\$ 8,600	\$ 8,600	
Video Editing Software (Beyond DV)	1			1		2	\$ 6,500	\$ 13,000	
Camera Stand (tripod w/wheels)					4	3	\$ 300	\$ 2,100	
Camera Stand (tripod)					2	3	\$ 200	\$ 1,000	
Microphones	1				4	3	\$ 100	\$ 800	
Pin Microphones					4	3	\$ 50	\$ 350	
Light Projector					4	6	\$ 90	\$ 900	
Uninterruptable Power Supply (UPS)	1	1	1	1	1	1	\$ 50	\$ 300	
Voltage Converter	1	1	1	1		5	\$ 150	\$ 750	
Video Recorder	1	1				3	\$ 100	\$ 300	
Satellite receiver		1		5		7	\$ 150	\$ 1,050	
Airconditioning units	2	2	1	2		10	\$ 300	\$ 3,000	
Electricity generator					1	1	\$ 400	\$ 800	
VCD player/recorder	1	1	1			4	\$ 50	\$ 200	
3 Mpixel Digital Camera	1				2	2	\$ 200	\$ 1,000	
Headphones	1				1	2	\$ 50	\$ 100	
Video Duplication (multimedia)						1	\$ 1,000	\$ 1,000	
Misc. (tapes, battery packs, chargers)						1	\$ 3,500	\$ 3,500	
Total station needs								\$114,850	

17 Transversal Issues

Three areas constitute a starting point for consideration of transversal variables impacting on the sustainability of Iraq's democratic transition and economic recovery. These three are Human Rights, Gender and Community/Youth Development.

In some cases these are over-lapping, but for the purposes of clarity, they are treated as separate items for investment by governments and aid agencies.

17.1 Human Rights

Liberation is an objective ChaldoAssyrians endorsed for decades. Actual liberation saw numerous ChaldoAssyrian entities and individuals support the Coalition and who continue to support the Coalition in its security and peace building operations. The billions of US dollars expended to remove Saddam Hussein and liberate Iraqis is producing one pertinent outcome that cannot be neglected, however: the flight of ChaldoAssyrians in the tens of thousands into Syria and Jordan, with a smaller proportion running to Turkey.

ChaldoAssyrian flight in an effort to seek refuge is inimical to US and international community aspirations. Without them and other minorities, meaningful ethnic and religious pluralism is gone and the seeds of political instability will be nurtured. The billions of dollars appropriated by US and other legislators did not expect to produce this outcome. It is also safe to assume that the populations of Coalition countries are also not intent on the cleansing of ChaldoAssyrians from Iraq (particularly northern Iraq, which is seeing the bulk of the problem).



A sophisticated and multifaceted project driven by elements within the northern region (particularly those connected to the KDP) is seeking to drive ChaldoAssyrians from Iraq in what is effectively an unbridled effort to maximize the territory and ethnic homogeneity of northern Iraq. This project is being undertaken with impunity. Relative to the attention drawn to Saddam Hussein's human rights violations, little to no profile is given to widespread human rights violations by warlord factions against minorities such as ChaldoAssyrians.

The few cases that are documented (such as those by Amnesty International and the International Committee of the Red Cross) are telling of the broader trends. Amnesty

International reports the following in one of its reports on human rights under Kurdish Regional Government auspices:

“In this report, Amnesty International has sought to highlight some of the structures, policies and behavior which lie behind human rights abuses in the region. Two principal factors stand out: the impunity enjoyed by the political parties' armed and special forces which has meant that perpetrators of abuses have not been brought to justice; and the active undermining of the judiciary and lack of respect for its independence by the political parties. The main political parties in Iraqi Kurdistan have not only ignored, but have also encouraged, human rights abuses by the forces under their authority as a means of settling political differences.”²⁴

Aside from the cases reported under the section on Safety and Security (above, involving crimes committed with impunity), there are also reports of directly political, deliberate crimes committed formally by KRG affiliated agents. These constitute patterns of violations affirming the validity of widespread ChaldoAssyrian attestations to systematic Kurdish Authority human rights violations.

In Amnesty International's discussions with the KDP about human rights abuse trends against ChaldoAssyrians it, "expressed its skepticism to Mas'ud Barzani about the families' ability to produce hard evidence of the KDP complicity, about their willingness to initiate legal proceedings, and about the effectiveness of the official investigations. The organization said that the killings themselves deterred the victims' families, eye-witnesses, other informants and members of the judiciary from taking measures for fear of meeting the same fate."²⁵

This represents just how little has changed for ChaldoAssyrians in Iraq. Readers interested in this subject area are urged to peruse materials produced by Amnesty International (specifically its 1995 report on human rights abuses in Iraqi Kurdistan since 1991 and many of its annual reports). Also, Human rights Without Frontiers, Indict.org, Assyrian International News Agency and Human Rights Watch.

24. Amnesty International, *Iraq: Human Rights Abuses in Iraqi Kurdistan Since 1991*. <http://www.amnestyusa.org/countries/iraq/document.do?id=487C2D0CAF7141C4802569A500714DC6>

25. Amnesty International, *Iraq: Human Rights Abuses in Iraqi Kurdistan Since 1991*. <http://www.amnestyusa.org/countries/iraq/document.do?id=487C2D0CAF7141C4802569A500714DC6>

To the present, Assyrian agencies and other human rights organizations have documented the following types of crimes in Iraq that are basic human rights violations, fueling the exodus presently occurring:

- Denial of criminal justice by policing bodies and the legal system;
- Illegitimate detention and torture during detention;
- Denial of the right to build churches;
- Land invasions;
- Business seizures/Business destruction;
- Property seizures/Property destruction;
- Work-based discrimination;
- Physical violence (assault, rape, kidnapping, torture, etc.)
- Murder;
- Assassinations;
- Reprisals against all who report human rights abuses and/or their families.

It is with this background in mind that a proposal is put forth to understand the causes of ChaldoAssyrian flight in the post-liberation period. To do this, a human rights mission is proposed to the ChaldoAssyrian refugee communities in three countries: Syria, Jordan, and Turkey – along with interviews and the collection of documentation from ChaldoAssyrians in western countries.

The human rights mission would comprise representatives as observers from US and European human rights and religious freedoms organizations and persons to facilitate translation and confidential interviews with the refugees. Confidentiality of the interviews is paramount as there are consistent patterns of reprisals either against those who level allegations or their families.

After collecting information about certain cases, they will be assessed for their validity. Those cases that will be followed up in Iraq will be undertaken in a separate mission, with efforts to protect family members still living in Iraq vulnerable to reprisals by the relevant authorities.

It is expected that the field research process will take up to 3 weeks and will produce a comprehensive report within two months

Table 17.1 Human Rights Mission Project Summary:

Item	Cost
Transportation	\$ 3200 p/p x 9 persons
Accommodation	\$ 1000 p/p
Per Diem	\$ 800 p/p
Operating Costs	\$ 5000
Report Publication	\$ 25,000
Report Distribution	\$ 10,000
Total	\$ 85,000

The report will facilitate an understanding of the nature of human rights violations against ChaldoAssyrians, a profile of the perpetrators (as individuals and the authorities on whose behalf they act), and will put forth remedial measures in terms of recommendations for redress of violations. Ultimately, the objective would be to reverse the gains made by human rights violators in terms of cleansing ChaldoAssyrians from key areas and providing for the safe return of the refugees to their country.

17.2 Gender Rights

The focus on women's development and gender equality in Iraq is widely accepted and appreciated by senior decision-makers involved in Iraq's transition. Women represent a critical element of the population with substantial skills. Ensuring equal development and opportunities between women and men is integral to seeing Iraqi society assume greater responsibility over its future.

ChaldoAssyrian women face particular challenges that their Muslim counterparts cannot understand. As Christians, ChaldoAssyrian women face constant threats of physical violence. The crimes committed against them – such as rape and forced marriage to the rapist – reflect the religious aspect of their oppression. Nonetheless, gender equality is a goal for women of all groups. Table 16.2 proposes the construction of 10 women's centers that will assist in ensuring that women have basic needs met for articulating their needs and participating in their communities as a group.

Table 17.2 Women's Centers in Northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Sifni*	Construction women union center	\$ 200,000
Alqush	Construction women union center	\$ 200,000
Baqofa	Construction women union center	\$ 200,000
Bartilla	Construction women union center	\$ 200,000
Bashiqa*/**	Construction women union center	\$ 200,000
Batnaya	Construction women union center	\$ 200,000
Karamles	Construction women union center	\$ 200,000
Mosul***	Construction women union center	\$ 300,000
Telesqof	Construction women union center	\$ 200,000
Telkaif**	Construction women union center	\$ 200,000
Total		\$ 2,100,000

* The Yezidis minority is a beneficiary of these projects.

** The Arab minority is a beneficiary of these projects.

*** Women of all minorities will be beneficiaries of this center.

17.3 Community and Youth Development

Developing a robust civil society is perhaps one of the most difficult quantifiable tasks at hand in Iraq. Prior to liberation, Iraqi regimes stifled any civil society development, channeling people's energies through party structures or repressing them outright. Civil society development is an essential element in nurturing a sustainable democratic transition. ChaldoAssyrians, and other minorities, who endured ethnic cleansing and cultural genocide, have an opportunity to reclaim their heritage and develop their communities with a view to becoming active Iraqis in their nation's transition.

Physical infrastructure is lacking, however, in realizing this objective. Other communities, such as certain Kurdish groups are accessing the funds needed to nurture civil society development. ChaldoAssyrians and other minorities in northern Iraq are facing discrimination in seeing this area of development in their community.

The community and cultural centers will provide an array of facilities, including communal areas, working rooms for civil society groups, internet facilities to capacitate the relatively indigent groups that are disempowered in this respect. Programs assisting members and

groups of the community will include, *inter alia*, small and medium business advice centers, skills development, and adult basic education in special skills.

Table 17.3 Community/Cultural Center Needs in northern Iraqi Towns and Villages

Town/Village	Description	Cost
Ain Sifni*	Community/Cultural center construction	\$ 320,000
Bakhdeda	Community/Cultural center further development	\$ 150,000
Baqofa	Community/Cultural center construction	\$ 320,000
Bartilla	Community/Cultural center construction	\$ 320,000
Bashiqa**/**	Community/Cultural center construction	\$ 320,000
Batnaya	Community/Cultural center construction	\$ 320,000
Karamles	Community/Cultural center further development	\$ 150,000
Mosul***	Community/Cultural center construction	\$ 650,000
Telkaif**	Community/Cultural center construction	\$ 320,000
Total		\$ 2,870,000

* The Yezidis minority is a beneficiary of these projects.

** The Arab minority is a beneficiary of these projects.

*** Women of all minorities will be beneficiaries of this center.

18 Appendix One:

Mosul Campus Project in the Nineveh Plain

(attached)

Nineveh University

Campus Project Proposal

April 2005

A proposal submitted by the



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1. Executive Summary

Education in Iraq is a priority because it facilitates the development of local human capital. This was one of Iraq's best resources, until the previous regime's policies came to full effect. UNESCO, reporting in March 2003 writes, "The Education system in Iraq,

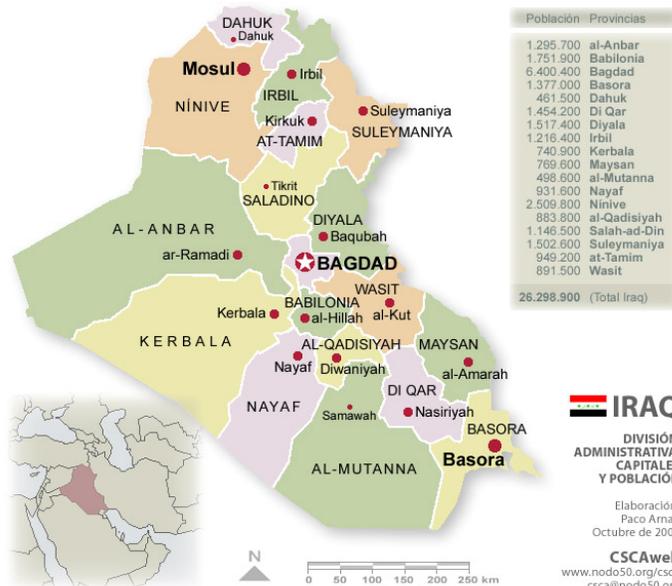


prior to 1991, was one of the best in the region, with over 100% Gross Enrolment Rate for primary schooling and high levels of literacy, both of men and women. The Higher Education, especially the scientific and technological institutions, were of an international standard, staffed by high quality personnel."

Higher education is a vital pillar for bolstering the sustainability of Iraq's transition economically, politically, and socially. The "congestion" in the higher education system requires the development of more higher education facilities. The state of decay and

demands of reconstruction in Iraq are placing a significant burden on the international community and many governments in all fields. Fostering higher education in Iraq is essentially part of an exit strategy for the numerous development agencies and programmes in the country, reducing Iraq's overall dependency.

The creation of a University of Mosul Campus in the Hamdaniya District of the governorate of Nineveh will greatly assist in addressing this policy priority.



The University of Mosul in northern Iraq , Iraq's second largest university, is a key source



University of Mosul campus, 2005

of higher education access for students. The natives of the area, and particularly in the Nineveh Plains, are systematically being denied access to this institution. The current trend of targeting of Non-Moslem communities, and especially women, who make up a substantial portion of the population in Hamdaniya are primary reasons for the premature termination of university studies for approximately 1500 students to date. Indeed, the targeting of Christians and Yazidis, is a key cause of their emigration from Iraq and constitutes a form of indirect ethnic cleansing. Iraq, prior to ousting of Saddam, was ranked 160th out of 170 countries in higher education access to women. The ranking is likely lower due to the increased level of violence and fundamentalism especially in Mosul.

Economic factors also play a role in denying students opportunities to pursue a higher education. For many of the present 2500 university students native to the Hamdaniya district (Nineveh Plains region), the costs of transport, its unreliability and the living costs preclude a chance at acquiring a university degree. Three nearby towns in the Nineveh Plains area of northern Iraq are the focus of this proposal with data showing 2122 university students of the approximately 2500 residing in these towns making it an ideal location for a university campus.



Map of Northern Iraq with the proposed location of a University Campus near the largest towns between the cities of Mosul and Arbil. The location would be between the towns of Bartilla and Hamdaniya.

A

Nineveh Plains University Campus will provide education in the critical sectors of: Education, Technology, Engineering, Economics, Humanities, Law, Agriculture, Tourism, Nursing and technical college programs. This will ensure that a key source of human capital necessary for Iraq's transition realize their full potential academically and begin utilizing their abilities at a critical juncture for the country.

Establishing a campus in this location also contributes to the reassertion of Iraq's rich, ancient heritage. The area is famous for its place in education and higher learning. The famous Assyrian library of Ashurbanipal was unearthed there, with its amazing 30,000 ancient tablets. This fact only compliments the



significance of providing higher education access to the local population.

Construction of the campus will generate jobs immediately, with firms and labor for the task readily available. Developing the management structure for the project will draw upon regional and community expertise, with a view to ensuring local ownership. The medium and long term job creation potential is vast, with the operations and management personnel needs, to teaching staff requirements being only one part. Developing the campus will attract numerous secondary businesses seeking to fill the demand for book stores, copy centers, internet cafes, restaurants, food supply shops, hotels and more.

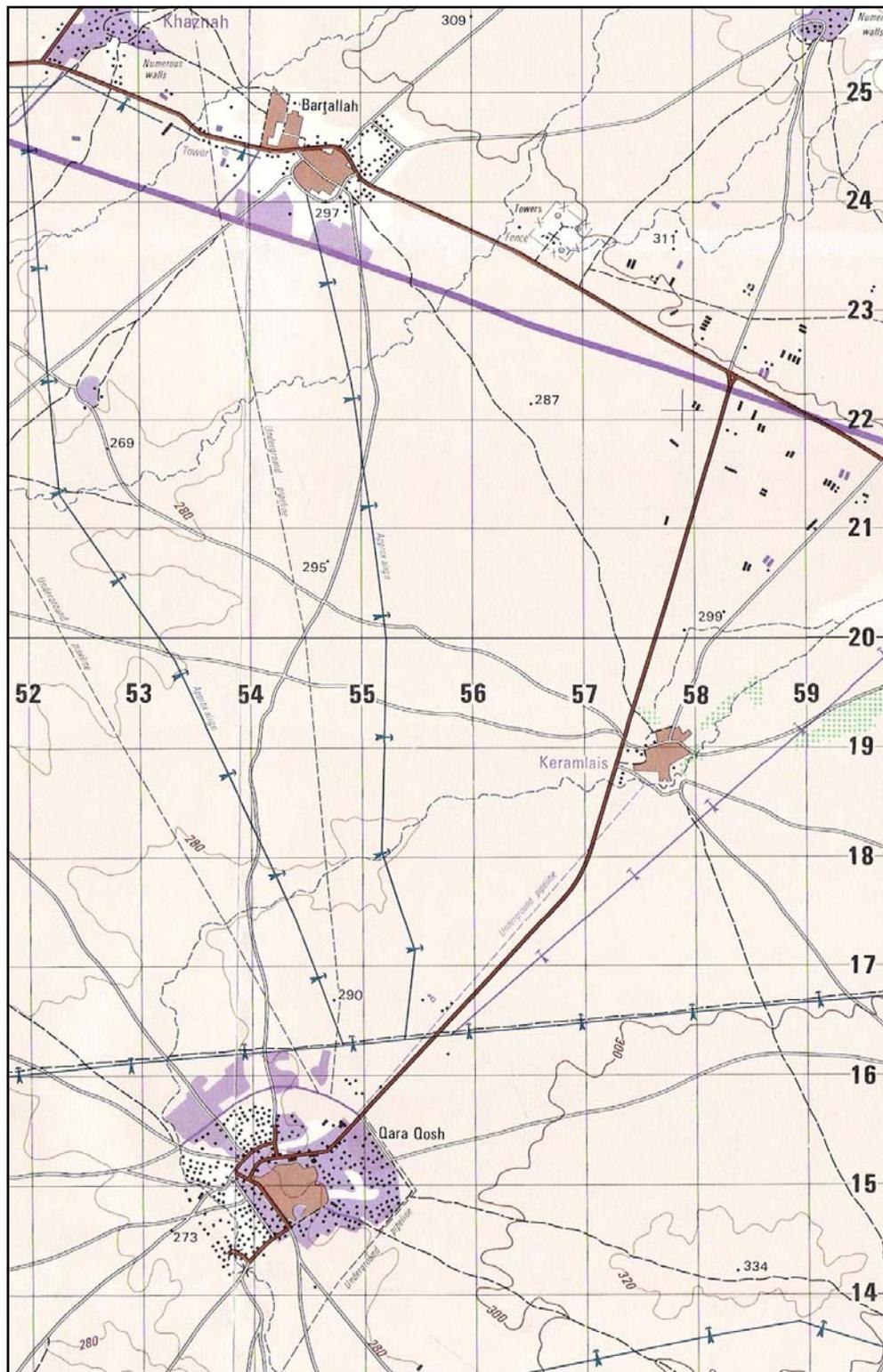
Given the rate of the ChaldoAssyrian exodus from the region, the potential human capital that exists in the number of students, and the financial viability of the enterprise, it is urged that careful consideration and support for this project be given.

2. Needs Statement

Higher Education Demand: This project aims to meet the demand of students in the Nineveh Plains area, and the area covered by the towns of Bakhdeda, Karmlesh, and Baritleh more specifically. Presently 1177 students in the Nineveh Plains area attend the University of Mosul. A significant amount of resources are consumed on transportation and other logistical requirements to facilitate university attendance in Mosul by these students. For many students of indigent families, attendance in Mosul is simply not feasible. Many students are unable to meet transportation and/or residence costs in Mosul.

The uptake of undergraduate students for the coming school year is 645, representing an increase of 54%. This increase in demand is connected to greater hope and opportunity, but resources do not exist for absorbing this coming cohort of students.

For the students who make the Nineveh Plains their home, there is one graduate student for every 7.7 undergraduate students. Given USAID's, the British Council's and the United Nations' Economic and Social Council's awareness of the importance of higher education,



Detailed map (1 mile/square) of the candidate area for the University campus proposed.

it is important to nurture and support their studies to completion (something that is not occurring at present).

High demand is compounded by a significant lack of supply. As the United Nations/World Bank's Joint Iraq Needs Assessments in dictates, "The [...] education system, once widely regarded as among the best in the Middle East, [has] seriously declined as a result of both a severe lack of resources and years of politicization." The United Nations and World Bank report goes on to say that institutions of education on a whole require significant investment to "relieve the serious congestion in the system." The data to hand and attached in the appendices reaffirms the level of demand in the Nineveh Plains area.

This is part of an imbalance in supply that is exacerbated in the areas around Mosul, where intimidation and outright violence are indicating to ChaldoAssyrians the "tacit inaccessibility" of the University of Mosul (more below).

Technical College Demand: At its peak in financial year 1989/1990, technical college enrollment equaled half of present university enrollment, at 147,942 students. This number declined rapidly due to previous government policies prioritizing military enrollment and the redirection of education resources. In northern Iraq, a resurgence of demand for technical college education is growing. Meeting this demand in the Nineveh Plains offers a key avenue for socio-economic development for those unable or unwilling to access higher education. Graduates from such programmes provide a key resource for the semi-skilled and technical fields that will play a key role in reconstruction and infrastructure development.

Safety and Security: Traveling from the Nineveh Plains to Mosul also comes at great personal risk to the students from criminals and insurgents. Recent data indicates the early termination of studies by over 300 students (almost 25% of the present number of students) due to threats received and in some cases, actual victimhood. This number adds to previous students who terminated their university education prematurely due to intimidation and fear.

This trend threatens to undermine the human capacity in the region – as Assyrians comprise a significant proportion of the skilled workforce.

Religious Freedom: Non-Moslem students face daily dangers and persecution on religious terms when attending school in Mosul. Assyrian students are being forced to wear Islamic attire. Cases of abduction, rape and murder are being reported on women refusing to comply with such demands. While this is a national phenomenon, it is a trend particularly pronounced in Mosul.

Religious freedom is a basic human rights matter and therefore comprises a key element of the rule of law. The Nineveh Plains Campus of the University of Mosul can cater to the educational needs (with facilities and resources) for law students. These students are studying in a field critical for developing Iraqi society's orientation towards respect for human rights and the rule of law. This critical link is appreciated fully by the United Nations and World Bank and is a specified need in their October 2003 report. The opportunity for these students to become lawyers is equally in jeopardy and requires redress.

The targeting of ChaldoAssyrians for their Christian faith is a regrettable fact of life in Iraq today. Awareness is not just prevalent in major Christian-based media sources, but also mainstream media, such as the Washington Times, which reported this on March, 29, 2005 that, "Christian Iraqi university students are hassled by Muslims. At the University of Mosul, Iraq's second-largest, 1,500 Christian students, in fear for their lives, have stopped attending classes." The New York Sun ran a report in August 2004 – almost one year ago – identifying the same trend, "assaults have prompted Iraqi Christians, one of the oldest Christian bodies in the world, to leave their country in record numbers [and] mark a milestone in the decline and possible disappearance of Iraqi Christianity."

The reality is that ChaldoAssyrians, as Christians, are under great pressure to disconnect from and ultimately leave Iraq, which creates a condition of indirect ethnic cleansing.

Poverty Alleviation: The particular area slotted for this development project is suffering economic decline. The agricultural economy in its present state is unable to sustain the needs of the community, adding to the factors driving residents from the region and primarily to the West.

Nonetheless, undergraduate students in the area of agriculture and agronomy represent close to 5% of the student population. These students will contribute essential skills to Iraq's economic recovery with agriculture identified by the United Nations and World Bank as a key element for economic diversification, job creation and growth of Iraq's economy.

Students unable to afford the costs of studying in Mosul end their studies after secondary school, further compounding the inability of the country to solve its socio-economic challenges independently. Reporting on the matter of targeting ChaldoAssyrians for their Christian faith, Father Joseph, a Mosul-based priest, stated that while ChaldoAssyrians comprise 3% of the population, they represent roughly 40% of the professional class. "by striking at them, 'the terrorists are striking at the country's culture and economy in order to weaken it and thus more easily subjugate it.'" The link between these students and their potential contribution as human capital for Iraq's economic transition is vital in this analysis.

A Mosul University campus in the Nineveh Plains area provides a fundamental basis for sustainable economic development and diversification in the three towns, the broader area, and the nation, mitigating the pernicious effects of the patterns identified above.

3. Goals

Goal One – Delivering Tertiary Education: United States and international development experts alike are making higher education a key policy priority. The project will ensure greater accessibility to higher education for many Iraqis presently seeing that opportunity denied – as explained above.

Goal Two – Further developing the human capital of Iraq and specifically the region is essential. This cohort of students will rapidly become in high demand as Iraq begins addressing problems on its own, becoming less dependent on international agencies and other governments.

Goal Three – Job creation will be a natural by-product both at the construction phase and maintenance phase of the physical campus. In terms of the actual scholarly needs of the campus, it will provide jobs to the significant number of teachers and professors (of which women represent a high proportion). This will also contribute to reducing the exodus of professional skills from the country.

More importantly, the campus will become a source for generating economic development as consumer demand grows by virtue of the student presence. Restaurants and food supply businesses will also complement the necessary book stores, copy centres, internet cafes and even hotels.

Goal Four – Many of the peoples of northern Iraq are opting to migrate out of the country. It is a natural consequence of despair and general hardship and religious persecution. It is critical to indicate to the people of the Nineveh Plains that their needs are being addressed by key decision-makers during this transitional phase. Underdevelopment in this area to date has a long-term impact on citizens' outlook and these perceptions must be overturned. The development of a major university campus will also inspire hope and confidence in the future, for the students and their communities.

Goal Five – At the most basic level, the project aims to provide educational opportunities in fields of study with significant demand.

Goal Six – Contributing to the culture of active citizenship and respect for human rights

regardless of ethnicity, religion or sex is essential to the transition taking place. One reason for creating this campus is the relative absence of such a culture within and around the University of Mosul.

4. Objectives

Objective One – Increase the number of students graduating in professional fields with essential skills for Iraq's economic development. This will take 2-3 years after the creation of the campus, to realize.

Objective Two – Maximization of enrollment opportunities for Iraqis in higher education. This will take place immediately upon completion of the campus.

Objective Three – Creating jobs in the areas of: construction, maintenance, campus teaching and management staff, and business opportunities surrounding the university. This will take place immediately upon acceptance of the project and the decision to proceed.

Objective Four – Filling critical jobs for Iraq's transition with Iraqis. This will take place 2-3 years after the creation of the campus, as graduating students begin entering the workforce.

Objective Five – Reducing the number of people migrating out of the region to other countries, particularly to the west. Baseline data will be developed against which to track migration patterns.

Objective Six – Increasing optimism about the transition process in Iraq. Survey data will be developed immediately on a time-series basis to evaluate the perceptions of people in the area of the three towns specifically and the Nineveh Plains generally.

Objective Seven – Establishing the faculties of Education, Economics, Humanities (Arts and Science), Fine Arts, Sciences (Engineering and other Technological fields) as the initial basis and providing for the development of the following faculties once feasibility is assured: Law, Agriculture, Tourism, Basic Education, and Nursing.

Objective Eight – To introduce a new tier of potential private sector professionals and public sector officials with higher education that are completely acculturated to a state of respect for human rights, the rule of law, and democracy.

5. Methodology and Timetable

As this project requires capital infrastructure development, institutional management and project management phases, these considerations have been explicitly delineated as follows:

5.1 Construction and Maintenance

Phase One – The funds for the project must be transferred to the University of Mosul in a separate account exclusively for the construction of the project. Administration of the funding is outlined below under “Project Management and Oversight”.

The initial sum will be for USD \$100,000.00 for the purposes of preliminary planning. A team of engineers and surveyors will develop the construction plans for the campus. Plans will take into account the educational demand in the area and the number of departments for inclusion. This team will commence operations upon acceptance of the project.

Phase Two – Construction of the campus will take place upon acceptance of the plans developed in Phase One.

5.2 Staffing (Education, Humanities, Technology (Engineering and Technologists))

Phase One – As a campus of the University of Mosul, and offering a diverse array of programmes, it provides an opportunity to access professors from across the region who can deliver lectures 1-2 days per week. In key programmes, a permanent presence will be necessary.

The project will begin communicating staffing needs and job postings across the staff spectrum for running the campus. Programme needs already exist and these will form a key part of the job descriptions of teaching posts.

The level of unemployment ensures the supply and readiness of low and unskilled labour. These posts will be deliberately targeting job creation with a view to poverty alleviation and the reduction of push factors driving emigration from the region – giving incentives to stay and/or return to the area.

Personnel agreements will take place 6 months before the completion of the construction phase of the campus. This will allow for organizational arrangements to be finalized in terms of class and lecturer time management and for the administrative apparatus to be in place to effectively cope with students enrolled in the build-up to the campus' opening.

Phase Two – A personnel performance management system will be used biannually to evaluate the performance of campus management and teaching staff. This will involve a student evaluation process merged with the more official management-driven evaluation. A key element of the evaluation, apart from the obvious focus on student performance in the various fields, will be the contribution of the lecturer to the culture of ethnic/racial and religious tolerance and the building of active citizenship in the student population.

The initial assessments will determine financial rewards and assist in the further definition of staffing needs for the campus.

Phase Three – Upon confirming the feasibility and sustainability of the campus, it will enter a review phase for more robust expansion into the fields of: Law, Agriculture, Tourism, Basic Education, and Nursing.

5.3 Project Management and Oversight

Management Board – Senior management guidance will be essential from the approval of the project to its signing-off point. A selection process for an interim Campus Chair will be set in motion immediately, combined with a board comprising representatives from the University of Mosul, community stakeholders, and a neutral, well-respected community member to serve (with a mandate akin to a neutral member of an internal audit committee) and the local student body representatives (who will have observer status – to ensure greater transparency in decision-making).

The establishment of this committee will be used for decision-making and provide a source of accountability.

Fiscal Oversight – All measures of financial management and transparency (in terms of accounting systems, tendering processes, and spending authorizations) will conform to international standards.

Information Gathering and Application – The same sources used to develop the surveys and student body census establishing the necessity and feasibility of the proposed campus will be applied to gathering information on each of the “Goals” of this project.

6. Evaluation

The following indicators will be used as measures of the project’s success:

Migration – Survey data monitoring migration patterns pre and post campus development

will assist in appreciating the project's impact on the economic push factors driving residents from the Nineveh Plains. Surveys will also target measuring the in-migration rate.

Economic – Survey programmes will Endeavour to capture socio-economic data to develop a profile on the type residents in the area (allowing for a +2.5% margin of error as household income levels tend to be understated in census and census-like surveys). Employment information will comprise a critical element of the surveys. This will be broken down along the lines of: full-time, part-time, long/short term, sustainability, and the number of people supported by the income.

Another aspect of the economic indicators includes information on the finances of the school and its financial self-sufficiency trends.

Concomitantly, the spending on the school will be correlated against the ensuing economic development in the area to establish the “economic rate of return” (providing an understanding on the extent to which the initial capital investment led to other economic activity in the region).

Social Perceptions – The views of people on confidence in the future of the region are fundamental to regional economic recovery and subsequent growth. This information will capture data on perceptions towards the development of the campus (allowing for a high degree of applied public participation in decision-making), but will also reflect the extent to which greater hope and confidence is being built about the future of the region, and by extension the country.

Trust, a fundamental pillar of developing social capital in a society will also be measured through standard questions used in the World Values Survey (applied to the local context). This will allow for evaluation on whether the decision to make a major capital, infrastructural investment and deliver soundly and transparently generates greater trust in

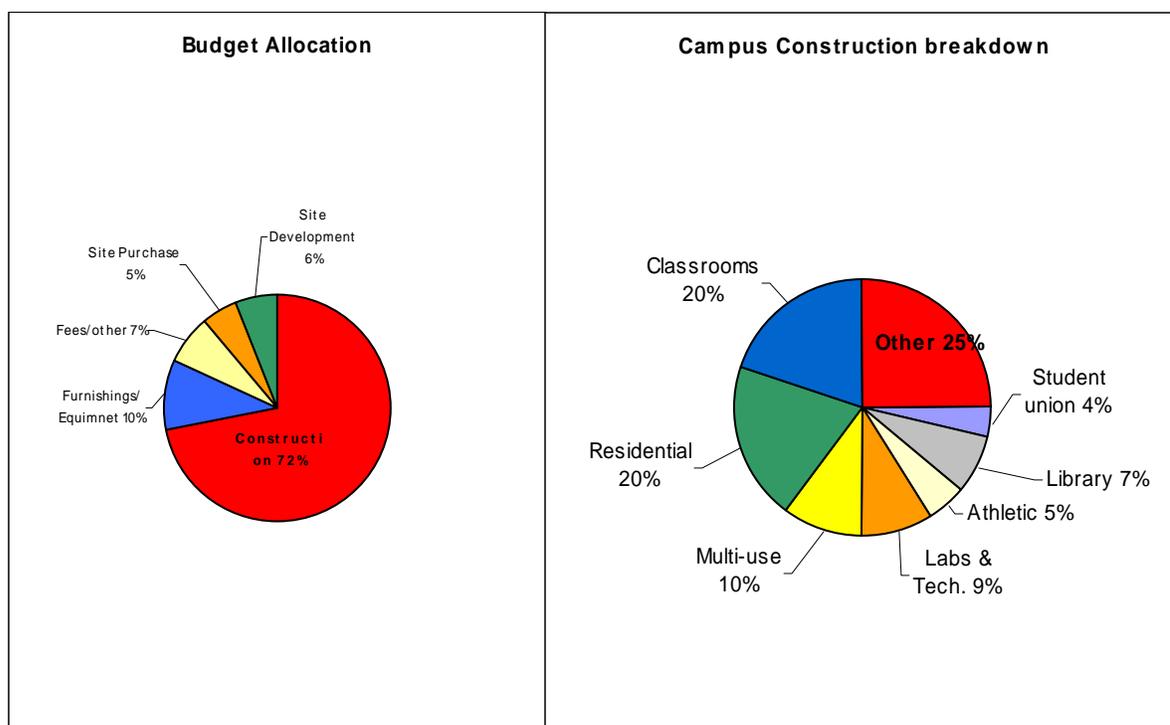
the institutions and processes of local and regional governance.

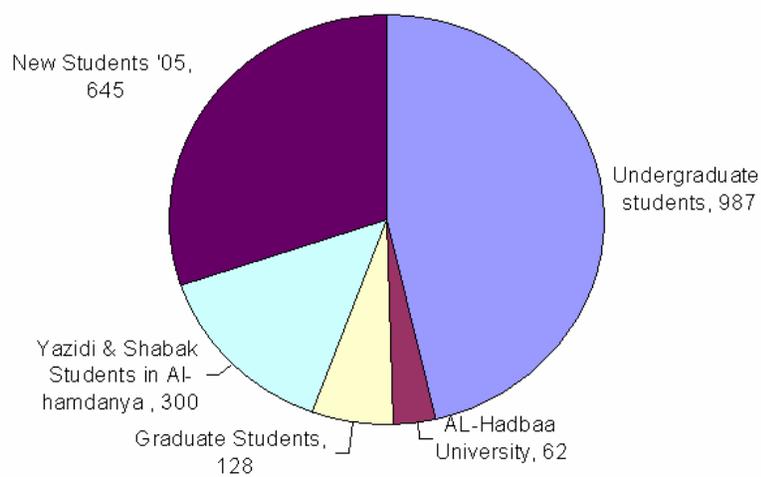
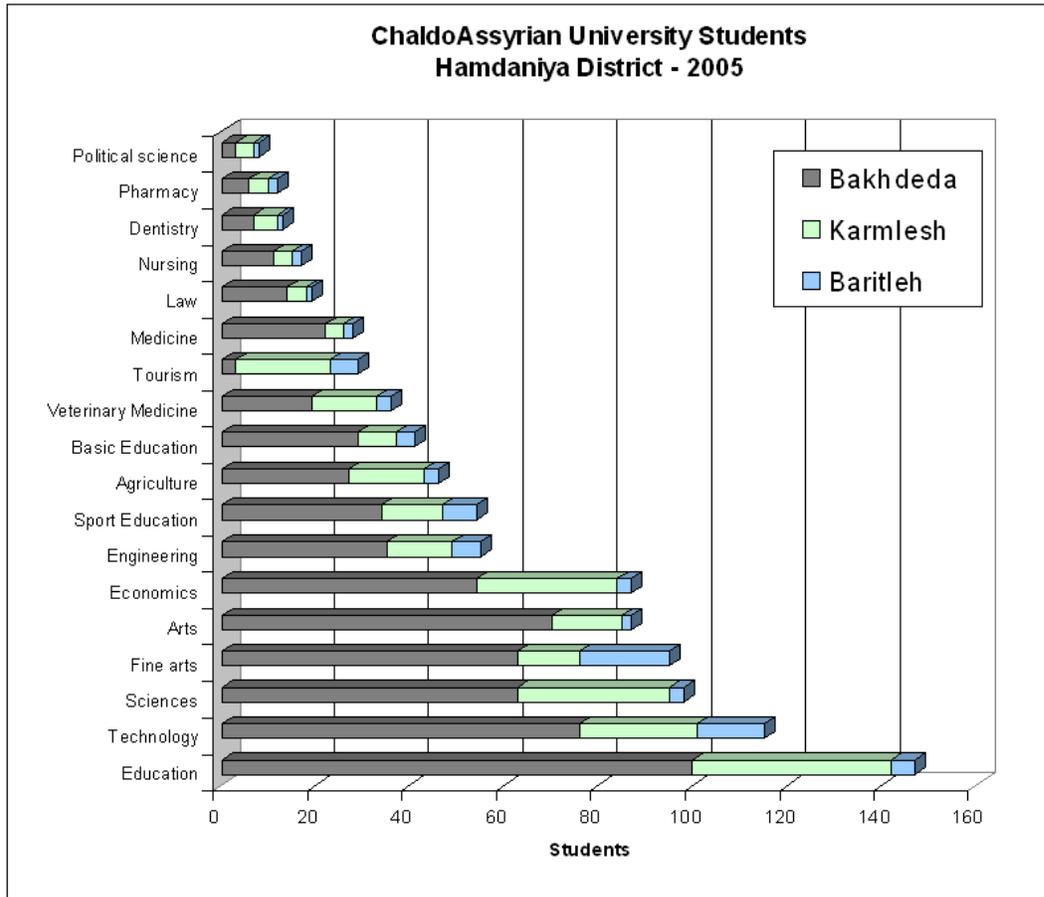
1. Budget Summary

The campus shall be developed on what is currently suburban farmland near the district capital town of Hamdaniya (Bakhdeda). The location would be no more than 5 km from the major highway (HWY2) connecting the city of Mosul to Arbil. The campus will have the capacity to immediately support 5000 students at a cost of less than 25% of the national average of what is spent in the US on high schools.

<i>Detail</i>	<i>Nineveh University Campus</i>	<i>US Secondary school (median)</i>	<i>Units</i>
Size (sq. ft.)	500,000	244,548	sq. ft.
Capacity (avg.)	6,000	1,450	students
Cost/sq. ft.	\$ 50	\$ 106	Dollars US
Cost/Student	\$ 4,133	\$ 17,862	Dollars US
square ft./student	83	\$ 169	sq. ft.
Total Budget	\$ 24,800,000	\$ 25,900,000	Dollars US

* American School & University Report May 2004





Graph: Student Population by Status

Appended Information

Faculty	Baritleh	Karmlesh	Bakhdeda	Total
Education	5	42	100	147
Technology	14	25	76	115
Sciences	3	32	63	98
Fine arts	19	13	63	95
Arts	2	15	70	87
Economics	3	30	54	87
Engineering	6	14	35	55
Sport Education	7	13	34	54
Agriculture	3	16	27	46
Basic Education	4	8	29	41
Veterinary Medicine	3	14	19	36
Tourism	6	20	3	29
Medicine	2	4	22	28
Law	1	4	14	19
Nursing	2	4	11	17
Dentistry	1	5	7	13
Pharmacy	2	4	6	12
Political science	1	4	3	8

Undergraduate students				987
AL-Hadbaa University				62
Graduate Students				128
Yazidi & Shabak Students in Al-hamdanya		300		
New Students '05				645

Total

2122

Table: Student Population Data gathered in the towns Bakhdeda, Karmlesh and Baritleh of the Nineveh Plains region graph: Student Population by Faculty

19 Appendix Two:

Model/Satellite Farm Development Project for Northern Iraq

(attached)

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- Section I DEVELOPMENT OF MODEL/ SATE LLITE FARM CONCEPT
- AN EXECUTIVE SUMMARY
- Section II BACKGROUND TO STUDY
- Section III PROJECT DESCRIPTION
- Section IV Cost Summaries



SECTION I

DEVELOPMENT OF MODEL/SATELLITE FARM CONCEPT: AN EXECUTIVE SUMMARY

An important objective of the Iraqi Government is to attract foreign investment and to bring to their country modern management practices and technology in order to improve the social and economic well-being of the Iraqi people.

Iraqi authorities have been especially interested in attracting foreign investment and cooperation in the agricultural sector. A number of agencies, both domestic and foreign, have developed and energetically pursued this goal.

The Model/Satellite Vegetable Farm proposed herein is not as large in terms of land area or financial investment as some other projects now under consideration or in process of development. The major advantages of the proposed Model/Satellite Farm scheme are that it can be quickly implemented and, in addition to creating employment/training opportunity, it will produce foreign exchange and achieve a number of important social benefits.

In the summary that immediately follows, the major features of the project and the resulting benefits are briefly described.

Background

The Iraqi Government, as part of its overall agricultural program, desires to expand vegetable production for export to the European and Middle East markets with high quality fresh produce. The Government also wishes to develop land outside of the Delta. Further, it is the policy of the Government to make employment available for all college graduates in the country. The Model/Satellite Farm proposed herein addresses all of these objectives.

Marketing Considerations

The Model/Satellite Farm Project was proposed to fill a marketing need; there is an established, growing market for off-season-(November-June) vegetables in Europe, and for all-season exports to the Middle East. To date, Iraq has not shared in these two markets.

The proposed Model /Satellite Farm would grow only those vegetables, and the specific variety thereof, that are in high demand in European markets during winter months. And because the Middle Eastern markets (including Iraq's) that have a year-round demand, the Model/Satellite Farm will be able to grow and export during all seasons, limited only by need for crop rotation and extreme weather conditions during specific and relatively brief periods.

Project Location (the land)

We realize description of most agricultural projects begins with the land or crops to be grown. Contrary to usual practice, we began with the marketplace because in our experience too many agricultural projects fail because marketing considerations have been neglected.

During a two-year period, we have examined a number of possible areas in northern Iraq, all having certain advantages and disadvantages. On balance, we believe the areas around Alqush, Barttila, Bakhdeda, and Telkaif are especially suited to this project.

Farmers in the surrounding area will be amalgamated under the Model Farm for a total of 1000 acres for each Model Farm.

The Model/Satellite Farm Concept

As the title implies, the project is based on modules, each consisting of a large model farm bordered by small satellite farms. Operations will be developed in increments, starting with 1, 000 acres for the initial model farm (carried out in two phases of 500 acres each). Over two years.

4000 acres will be brought under cultivation, with further expansion readily achievable.

When fully developed the project would employ about 150 full-time workers and an equal number of part-time field hands during peak periods (especially harvesting). The Model Farm performs the function implied by the name. It will use all the modern managerial and technological policies and procedures that has made California agriculture so profitable. The operation will be highly mechanized to maximize profits.

The satellite farms, of 20 acres each, will be operated by young Iraqi agricultural college graduates. Local government will make land available to them, under attractive incentive conditions, after they have been trained through employment on the Model Farm and meet other qualifications as established by local authorities.

Satellite farmers will continue to receive "extension" advice from Model Farm personnel and will rent from the Model Farm "pool" all expensive farming equipment necessary to their operation. The Model Farm will also serve as purchasing agent for inputs such as seeds, fertilizer, chemicals, etc.

Financing the Project

It is assumed that majority ownership will be Iraqi, with support by American, local government and friendly Arab country nationals or institutions.

To the maximum extent possible, debt financing will be used and it is hoped that grant funds will be obtained to support the training and research activities so necessary to the successful operation of the satellite farms.

SECTION II

Background to the Study

Before proceeding with details on the scope and approach of the feasibility study, it would be well to restate the objectives of the Model/Satellite Farm Program, viewed from two perspectives:

1. From the Iraqi side, the objectives are:
 - To develop exports to increase foreign exchange and to develop unreclaimed lands;
 - To adopt modern management methods and technology in the agricultural sector;
 - To carry out the policy of guaranteeing meaningful employment to college graduates;
 - To encourage investment in and development of the private sector, particularly, if possible, in agricultural enterprises upon reclaimed lands.
2. From the American side, the objectives are:
 - To assist Iraq in economic development
 - To apply American know-how to Iraqi projects that attain its goals and encourage American companies to share with Iraqi agents;
 - To enhance the effectiveness of USAID funds allocated to Iraqi infrastructure development and economic recovery.

Overall benefits of the Model/Satellite Farm project:

- The Model/Satellite Farm project was developed along different lines from those of the usual agribusiness project, for example:
- It can be implemented quickly, primarily because it is relatively small in comparison to other agricultural projects.

- It will, if successful, represent a format that can be quickly multiplied in other areas of Iraq and for other types of agriculture.
- It justifies various forms of financial assistance from both USA as well as Arab fund sources, because of unique features:
- Employing and training graduates (and others) in modern agricultural techniques
- Developing individuals to be self-reliant "profit centers."

SECTION III

PROJECT DESCRIPTION

The total program of the Model/Satellite Farm Project consists of three interactive elements:

1. Production of high-value, high-quality vegetable crops on a large scale using advanced, mechanized methods.
2. Employment and training of agricultural college graduates on the Model Farm with the incentive of possible future financial independence, resulting from their operation of a satellite farm.
3. A guaranteed export market, through an independent marketing company related to but not involved with the farming operation.

In the remainder of this section we discuss in some detail the results of preliminary research on the subjects of crop production and marketing. Based on the limited information available to us concerning the four initial Model Farms, their land and local costs of production, we have had to make a great number of assumptions. On the subject of marketing, we feel somewhat more confident, since we have a good deal of experience in studies and actual operations in this area.

Although, as previously noted, the proposed project is heavily market-oriented, we will begin this discussion with comments on the farming operation - the crops to be produced and estimates of the cost of production and the magnitude of the investment involved.

Following this material, we will present the results of preliminary marketing research.

A. AGRICULTURAL OPERATIONS AND FINANCIAL ESTIMATES

The Model/Satellite Farm Operation

Designed for development on existing underdeveloped smallholder farms, the Model/Satellite Farm Project is tentatively planned for farmland around Alqush, Barttila, Bakhdeda

and Telkaif where preliminary tests have shown soils, climate, and available water adequate to support vegetable farming.

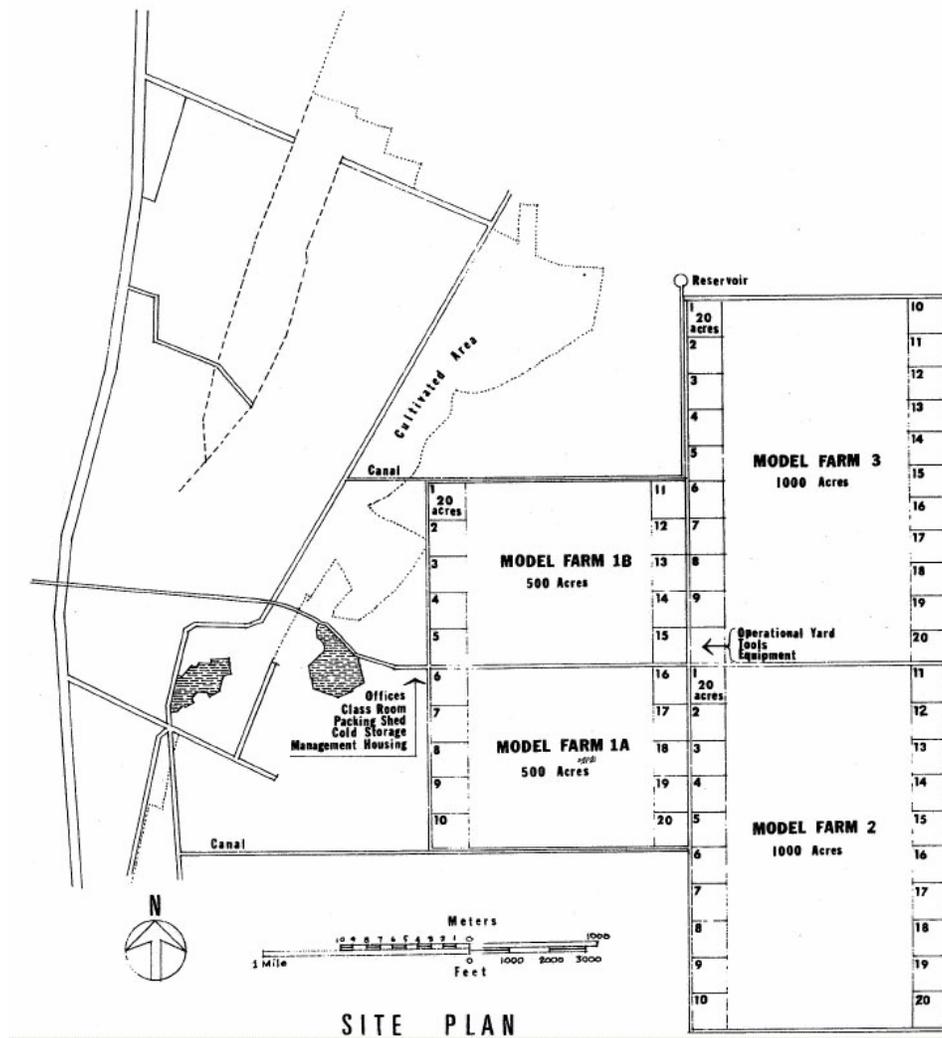
During our many visits to Iraq, we explored and in some cases examined in some detail a number of planting areas in the north. Each of the many areas visited offers advantages and disadvantages, but on balance, these are most sound for initial development. As it is somewhat out of the "main stream," because much of Iraq's farmland was issued upon political considerations to Saddam Hussein's supporters, we think it would be socially and environmentally attractive for an agricultural experiment such as the proposed Model/Satellite Farm Project.

The Farm Layout

In considering the following description, frequent reference to the "sample site plan" on the following page is recommended.

The overall plan is to develop the project in three modules of a little more than 1,000 acres each. This plan is recommended so that if for any reason the first 1,000-acre increment fails to meet operational or financial objectives, the entire project can either be abandoned or be revised before proceeding to the second 1,000 acres. In keeping with this philosophy, the first 1,000 acres will be developed in two phases of 500 acres each.

The overall scheme is that 20 satellite farms, each of 20 acres, will be located on the borders of the 1,000-acre model farm modules.



Typical Model/Satellite Farm Program

The first 1, 000 acres is recommended only in the interests of speedy implementation. In order to realize the economies of large-scale, mechanized vegetable production, 1, 000 acres are necessary, especially where the investment in infrastructure is so heavy.

Thus, it will be seen that a module consists of 1, 200 planted acres (1, 000acre model farm plus 200 acres of satellite farms). Roads, windbreaks, a reservoir, office buildings, sheds, packinghouse, warehouse, repair shop, etc., will require 300 to 500 acres, leaving an equal area for contingencies - expansion of planted area or supplemental services.

Operational Plan and Schedule

Earlier in this section we described in general terms how the Model/Satellite Farm concept will be developed. We have developed a tentative schedule for carrying out the various operations from initial land survey through harvest. Our tentative thoughts on scheduling are reflected in the chart on the next page. In general, about a year will be required to complete all the preplanting operations summarized in the upper left-hand corner on the following schedule.

The entire schedule is designed with two basic objectives in mind: first, to get the first 1000 acres into production as soon as possible for each of the four farms, and, second, to complete operations that affect the entire 4000 acres at one time, if in so doing costs would be lower than doing such work for 1000 acres at a time.

By reference to the schedule, it will be seen that (as previously described) the first 10 satellite farms will not be undertaken until the second year.

Acres Under Production

Year	Model Farm	Satellite	Total
1			
2	500		500
3	1,600	50	1,650
4	2,000	150	2,150
5	3,000	400	3,400
6	3,000	700	3,700
7	3,000	1,000	4,000
8	3,000	1,200	4,200

Note: Towards the latter half of Year Two, it will be necessary to evaluate expansion of Model Farms and account for the preparedness of students to take on satellite farms. It is projected that at least 50 will be able to do so by Year Three.

Crops To Be Produced.

Based upon our knowledge of soils, climate, and water quality, we believe some 20 crops can be raised, as follows:

Crop	Percentage of Total	Crop	Percentage of Total
Asparagus	2	Eggplant	1
Cucumber	8	Cabbage	7
Zucchini	5	Broccoli	1
Garlic	2	Sweet Potatoes	2
Radish	3	Green Onions	1.5
Sweet Corn	1	Carrots	6
Sweet Peppers	13	Dry Onions	9
Lettuce	12	Ogen Melons	1
Tomatoes	7.5	Honeydew Melons	9
Cherry Tom.	1	Watermelons	5
Okra	3		

On principle, however, we would probably want to begin with those crops that are easiest to grow and ship and those that have a ready acceptance in European markets. Examples are dry onions, early potatoes, and tomatoes.

We plan that the 1000 acres of satellite farms would have the same general crop mix as the 4000 acres of model farms. We expect, however, that each satellite farm will specialize in

only one or two crops (the second crop to provide rotation). This policy of specialization will permit maximum profits for the individual operator.

The tabulation above indicates our present best guess of the product mix when all cultivated acres are under full production. This product mix is based on a number of factors involved in both operations and marketing and the financial implications of these twin aspects of the total program.

Economics of Crop Mix

As has been mentioned a number of times, the proposed project has been planned to respond to the marketplace. The crops tentatively selected for production are those we know through our market research to be in demand and can be successfully produced for winter harvest.

In order to project the economics of the proposed operation, we have estimated:

- The yields per acre
- The cost of production per acre for each crop
- A crop mix (per 1000 acres)
- The number of harvests per year.

Our conclusions regarding the above items are reflected in the schedule on the next page. As seen in the last two columns, we believe it reasonable to assume that a thousand acres of harvest (assuming the crop mix indicated) would yield an annual revenue of about \$2.7 million - or a net profit of \$405,000 (assuming a profit margin of 15 percent on cost of production).

Of course, total revenue and gross profits are only part of the story; in the final analysis, the critical factor is return on investment. To estimate this factor, it is necessary to estimate the total investment, discussed below.

At this point, we can do little more than estimate the investment involved; there are just too many unknowns. But based on our years of experience in similar projects, our guesses are likely to have considerable validity.

Capital Investment

The major capital investment items are:

- Infrastructure, roads, canals, windbreaks (see Needs Assessment)
- Facilities and utilities (see below)
- Irrigation system (see Needs Assessment)
- Machinery and equipment (see below)

We have, again based upon few facts, estimated some of these costs as discussed below. Some of these are covered in the ISDP Needs Assessment for Northern Iraq.

Facilities and Utilities.

Here we have been able to make more accurate guesses, based on experience in other farming projects. We estimate expenditures of about \$7 million for items in this category for all 4000 acres. The schedule on the next page details these items and estimated costs.

The second major item of expense, the cold storage facility, is a must for exportable winter produce, both for pre-cooling prior to storage and for storage while waiting for shipment.

Also, proper storage can extend the salability of some crops (such as carrots) for many weeks.

Machinery and Equipment.

We have been able to project approximately the types and numbers of machines and equipment that will be necessary to operate both the model and satellite farms; these items are detailed on the attached schedule.

As the schedule indicates, the equipment can be acquired as the farm develops over the eight-year period. This would have two financial implications:

Machinery and Equipment Schedule per Model Farm

Item	Model Farm Requirements Planted Acres			Satellite Farm Requirements Planted Acres			Combined Requirements Planted Acres	Estimated Costs
	1000	2000	3000	100	600	1200	4200	
Tractors:								
80 hp	1	2	0	1	1	0	5	86,625
40 hp	4	2	2	1	2	0	11	90,156
25 hp	0	0	0	2	2	2	6	30,240
15 hp	0	0	0	2	2	2	6	21,894
Rear Blade	2	1	0	1	1	1	6	12,600
Planters:								
KC Two-Bed (Stanhay)	2	2	2	1	0	1	8	16,800
KC Two-Bed (Planet Jr.)	3	2	2	1	2	2	12	25,200
KC Four-Bed (Planet Jr.)	0	1	1	0	0	0	2	8,000
V Planter	1	1	1	0	1	1	5	3,000
Grain Drill. 14 in.	2	0	0	0	0	0	2	8,400
Land Prep. Equipment:								
Float, 12in.	2	2	2	2	2	2	7	7,000
Subsoiler	2	1	1	1	0	1	6	11,340
Disk, 13 in.	1	1	1	1	0	2	6	37,800
Disk, 12 in.	1	1	1	1	1	1	6	31,500
Triplane	2	1	0	1	0	0	4	37,800
Bottom Lists	1	1	1	1	0	1	5	8,500
Rotovator	2	2	2	1	1	1	9	47,250
A-Frame	1	1	1	1	0	2	6	6,000
Cultivators:								
KC Cultivation Sled	2	2	2	1	0	1	8	12,000
Howard One-Bed Rotovator	0	0	0	1	1	1	3	10,950
Pest Control Equipment:								
Stainless Steel Spray Tanks (sets)	3	1	2	1	1	1	9	16,200
Duster, Hamby	1	1	2	1	0	1	6	3,600
Hand Sprayer	1	0	1	3	7	10	22	13,200
Weed Sprayer (150gal.)	2	1	2	0	0	0	5	10,000
Weed Sprayer (50 gal.)	1	1	1	1	1	1	6	6,000
Hand Duster	0	0	0*	2	2	4	8	2,000

Machinery and Equipment Schedule per Model Farm Continued

Vehicles:								
Labor Bus	1	0	1	0	0	0	2	70,000
2 WD Pickup, 3/4 ton	2	1	1	0	1	1	6	36,000
4 WD Pickup, 3/4 ton	1	1	1	0	0	0	3	24,000
1 Truck, 2 ton	2	1	1	0	1	1	6	120,000
Land Rover	2	1	1	1	1	1	7	84,000
Flatbed Trailers	3	1	1	1	1	2	9	32,400
Motorbike	2	1	1	0	0	0	4	2,000
Miscellaneous:								
Mech PTO	2	1	0	0	1	1	5	2,500
Undercut	1	1	1	0	1	1	5	1,000
Hoes, Shovels, Picks	50	25	25	20	30	50	200	3,000
Lettuce Knives	40	20	20	10	10	30	130	520
Sheepshears (onion)	20	10	10	5	10	20	75	375
C-taps	100	100	100	50	25	25	400	2,000
Spray, 3 gallon	0	0	0	10	20	20	50	2,500
Vegetable Wheelbarrows	10	10	20	5	10	20	75	3,750
Cement Wheelbarrows	5	5	0	5	5	0	20	1,700
Radio and CB Units	4	5	6	0	0	0	15	37,100
Spares and Repairs	~ 3% of above items (\$1,231,900)							
Subtotal								\$1,269,000
Crating, Ocean Freight, Drayage ~ 30% of Subtotal								381,000
Total Equipment								\$1,650,000

Northern Iraq Model/Satellite Fan Project Machinery AND Equipment Schedule

Item	Est. Cost	Total
Repair Shop Tools and Equipment:		
Victor Acetylene Gas Cutting Torch	\$ 185	
Lincoln Portable Welder with AC Outlet	1,650	
Baldor Bench Grinder, 7in.	155	
Black & Decker Portable AC Hand Grinder	180	
Blue Streak Battery Charger and Starter Unit	225	
Champion 80 Gal., 3 hp Air Compressor	1,450	
Electromagic High Pressure Water Cleaner	1,600	
Wilton 2780 Drill Press. Model 6660-B	465	
Black & Decker 1/2 in. Hand Drill	105	
Mac 1/16 – 1/2 in. Drill Bit Set	69	
Grigg 25 ton Hydraulic Press	400	
Hein Wemer 5-ton Hydraulic Jack	58	
Hein Wemer Floor Jack	370	
Columbian 4-in. Vice	78	
Columbian 6-in. Vice	105	
Coats Complete Tire Service and Repair Equipment	950	
Therm. No. 621, 1-1/2-ton Chain Hoist	90	
Three La France Fire Extinguishers at \$16 each	48	
Two 4,600-cfm, 1/2 hp Blowers at \$225 each	450	
Gasoline Storage Tank and Pump, 1,000 gal.	2,500	
Diesel Storage Tank, 1,000 gal.	1,500	
Black & Decker 7-in. Heavy Duty Skill Saw	125	
Chicago 1/2 –in. Drive Air Impact Wrench	125	
Rodac 3/8-in. Drive Air Impact Wrench	95	
MAC Complete Mechanic Tool Set and Case	1,250	
Lincoln Welding Rod	161	
Miscellaneous Additional Equipment & Supplies: Bolts, Cabinets Brooms, Grease, etc...	4,000	
Total – Shop Tools (NOTE: for USA costs, assume cost will be double; therefore)		\$36,778
Office Equipment and Supplies:		
Equipment:		
1 Desk Readout Calculator	345	
3 Portable Calculators at \$40 each	120	
1 Electric (IBM) Typewriter	800	
2 Manual Typewriters at \$300 each	600	
1 Copy Machine	500	
2 Electric Adding Machines at \$210 each	420	
5 Metal, four drawer file cabinets at \$230 each	1,150	
2 Metal bookshelves at \$110 each	220	
6 Metal Storage Cabinets at \$140 each	840	

Project Machinery AND Equipment Schedule—Continued

Miscellaneous Office Equipment	1,000	
Total – Office supplies		\$3,995
Furniture:		
11 Metal Desks, various sizes	\$3,330	
11 Desk chairs	970	
14 Side Chairs	770	
2 Sofa Beds	1,350	
3 End Tables at \$90 each	270	
4 Desk lamps at \$55 each	220	
2 Bookshelves at \$180 each	360	
1 Conference table	480	
6 Chairs	360	
Miscellaneous Furniture	1,000	
Total Furniture		\$9,100
Other Items:		
1 35mm Camera	\$325	
1 Polaroid Camera	180	
1 Slide Projector	230	
3 Small Electric Refrigerators	960	
6 Fire Extinguishers	180	
3 Electric Cooled Drinking Fountains	330	
Books	300	
Technical Magazine Subscriptions	150	
4 Flashlights	60	
1 FM Radio Transmitter	2,250	
1 CB Base Set	225	
4 CB Pickup Units	480	
Miscellaneous	800	
Total – Other Items		\$7,465
Office Supplies, Stationary, etc...		1,000
Grand Total		\$20,570

- Reduced risk if the program should prove during early stages to be unsound or uneconomic
- Postponement of investment until needed, thus reducing the original capital outlay.

It is assumed that all equipment will be owned by the Model Farm and that equipment will be rented by the satellite farms if and when needed. Certainly the satellite farm operators will be unable to afford to own the mechanical equipment to farm the first 5 or 10 acres, and yet

having such mechanical equipment available will greatly increase their yields and reduce production costs, besides improving the quality of product.

Another possibility would be for an independent company to own all equipment and lease to both the Model Farm and the satellites. This would reduce investment for the operating company, and the equipment would, in the event of failure of the program, be available for sale or lease to other Iraqi agricultural projects. This alternative is offered purely as an investment consideration and in no way relates to the efficient operation of the farming project.

The machinery and equipment list has been priced out at about \$1,650, 000, but this estimate is subject to major revision according to eventual determination on exact equipment necessary for an efficient operation and possible availability of contract services in Iraq that would obviate the need of purchasing a number of expensive items.

Working Capital Requirements

Thus far we have been discussing capital investment items. There is, of course, also need to consider operating costs. For the most part production costs, presented earlier, cover various inputs such as fertilizer, water, power, fuel, chemicals, etc. Estimates have also been made for some provision for labor, but because this is such an important item it is treated separately. Personnel costs can be grouped into two major categories, management and labor; each will be commented upon separately below.

Management.

Attached is a chart of organization that indicates one of many possible alternatives. In this plan we envision that about 15 individuals will be sent over from America to plan, organize, and manage the operation during the early stages of the operation. One of the objectives of the management contract will be to train locals to take over as soon as possible. However, for purposes of financial projections we will assume the expatriate staff will remain during the first eight' years of the operation.

We estimate that this management team will cost from \$750,000 to \$1,000,000 per year. About a quarter of that amount is included in estimated costs of production.

Of course, the operation could be undertaken with fewer expatriates and at greatly reduced costs if it were not for the satellite farm operations, which involve a great deal of training both on the job and in the classroom. Eventually we will be able to estimate the pure "operational costs" as compared to training expenses.

We estimate that for every 1, 000 acres of planting, about 50 full-time and 50 part-time employees will be required. Of the 50 full-time workers, we expect that during the early years half of these people would be agricultural college graduates in training and candidating for selection to take over one of the satellite farms. Probably these trainees would be less efficient than workers employed full-time but without the background for eligibility for model farms. This factor, too, would be an added expense and should be charged to "training" rather than operations. We have estimated the following personnel expenses:

Category	Acres of Production			
	1,000	2,000	3,000	4,200
Management Group:				
Numbers				
Annual Expense	\$750,000	\$750,000	\$750,000	\$750,000
Full-Time Labor:Numbers	50	100	150	200
Annual Expense	<-----To be estimated----->			
Part-Time Labor (half- time)				
Numbers	50	100	150	200
Annual Expense	<-----To be estimated----->			
Total Staff: Numbers	115	215	315	415
Annual Expense	<-----To be estimated----->			

Note: Some duplication of expense and provision for training.

Financial Summary.

As has been frequently stated throughout this section, we have prepared some financial estimates for production costs, revenue, and capital investment. These estimates were made in the absence of many vital facts and are offered only as orders of magnitude. They are summarized below.

Western Europe, especially during the colder months of November to June, imports fresh vegetables and fruits from a wide variety of countries located in warmer regions. The volume of vegetables (excluding potatoes) imported in Western Europe is estimated in the range of 2 million tons per year, with 75 percent of the total imports occurring during the November-June season.

In Part A of this section we recommended some 20 vegetables for production on the Model/Satellite Farm. In considering the marketing aspects of this project, we are especially interested in the potential for those specific products.

Although western Europe maintains detailed records of vegetable imports, some of the commodities are combined so that it is impossible to determine volume and value of all 20 crops recommended for planting. However, we have been able to, gather import data on eight of the items contemplated for the Model/Satellite Farm, as presented in the following table. Admittedly these figures are very rough estimates, but they suggest the order of magnitude of the proposed operation.

Commodity	M/S Farm	EEC Imports		
	Tons at Full Production (4,200 acres)	Estimated Farm Gate Price	Tons	Estimated Value (US \$ million)
Asparagus	170	\$ 135,240	400	1.26
Cucumbers	2,688	1,236,480	55300	33.07
Squash / Eggplant	840 295	869,400	20200	13.77*
Garlic	545	131,860	3700	2.70
Peppers	3,822	483,485	21000	18.70
Tomatoes	3,465	2,125,200	27000	19.28
Sweet Potatoes	420	72,450	20600	18.68
Totals	12,245	\$5,054,115	148,200	107.46

SOURCE: EU import data on 8 of the 21 commodities recommended for planting.

NOTES:

1. Total tons of production of these 8 commodities at full (4,200 acres) Model /Satellite Farm operation would be 12, 245 tons. Note that these 8 commodities would account for only 26 percent of total production.
2. Of the 12,245 tons of production, assume 75 percent of export quality; thus 9, 185 tons to be exported would represent only 6 percent of the available production.
3. Estimated farm gate revenue for 9,185 tons of production would be about \$3, 790, 585, which would be equal to only about 3. 5' percent of landed cost. Of course when freight from Iraq to Europe and import duties are added, the Iraq selling price would increase along with revenue.
4. From the above calculations, a rough estimate of total Model/Satellite Farm exports could be as much as 36, 600' tons, for a farm gate revenue of \$15,162,000.

*EU data combine these items.

Economic success in vegetable farming for export will never come from efforts to sell what has been produced; success will come only from supplying a demand known to exist. This is the way to ensure that the share of market value is as high as the share of market volume.

Market research already performed has identified the high-demand, high-value crops. If these crops are indeed raised on the Model/Satellite Farm Project, will Iraq be able to enter the EU and Middle East markets? This question leads to the functions of the separate marketing company proposed as an integral part of the overall program.

Marketing /Export Company Functions

Marketing is an enterprise in itself, requiring complex information systems and constant attention to trends in buying and pricing. For this and many other reasons, a separate company is proposed to assume all responsibilities after delivery of farm products to the packinghouse.

The packinghouse and refrigerated storage facilities will be owned and operated by this separate company, which will handle export sales as well as distribution to Iraqi hotels, restaurants, and produce markets of produce that fails to meet the rigorous export standards. (It is expected that roughly 75 percent of the total harvest will qualify for export.) The marketing /export organization will be directed by experts in the complex logistics of

produce marketing, including promotion and packaging requirements. These specialists will work in close cooperation with the Model Farm management in choosing and scheduling varieties of vegetables for optimal profitability, based on continuous research and update of changing market condition.

The marketing company will be either an offshore company or one organized under the Free Zone provisions, but will have no relationship to the Model Farm or satellite farm operators, operating on an arms-length basis. Shares in the marketing company, however, could be owned by entities so that they would know at all times that their interests were being protected and that they were receiving maximum returns for their produce. There are a number of reasons why the proposed marketing company should be independent of the farming entities, among which are the following:

1. Philosophically, we believe that farmers should farm and marketers should export.
2. The marketing company will be available to export products of other entities in Iraq, either in the immediate vicinity or throughout the country. Such a program would assist other agricultural producers in northern Iraq to obtain maximum value for their product and at the same time permit the marketing company to handle larger volumes of product, which would spread the overhead over a larger base, thus maximizing returns of the operation.
3. The marketing company will also be in a position to market fruit and vegetables grown by neighboring Arab countries. Not only will this assist their economic development, but will further spread the marketing overhead and ensure availability of product in case of a crop failure in any one location.

The marketing/export company will manage grading, sorting, and packing operations. On delivery of product to the packinghouse, farm operators can either be paid according to pre-negotiated fixed prices or on a consignment basis. The marketing company must have authority to decide what proportion of harvest qualifies for export, since reliable shipment of uniform and high-quality produce is the most critical element of the marketing program and must be under strict control.

Importers, wholesalers, retailers, and the ultimate consumer in Western European markets are careful buyers and tend to buy the same brand name from the same source, year after year. The marketing company must apply all possible expertise, knowledge of contacts, and experience to break into the EU market with a new brand name from a country not recognized as a shipper of high-value, high-quality produce. Consequently, development of an appealing brand name, its promotion, and -most important- strict quality control of the product are

essentials and are all highly specialized functions of the marketing company that must be done with excellence simply to sell the first shipments from Iraq.

The Middle East Potential

As mentioned earlier in this section, the Middle East, primarily Saudi Arabia, Kuwait, and The Emirates, represents an attractive potential for Iraqi exports. This is a growing market and, perhaps of even greater importance to the Model/ Satellite Farm Project, one that will take summer production, which Europe will not.

Further research will be performed in the feasibility study to determine the specific crops and harvesting schedules that would best meet the demands of this substantial and growing market.

Share of Market

The incremental development of the Model/Satellite Farm Project is practical from the marketing standpoint as well as from the agricultural standpoint. If all market standards are met, acceptance will increase as production rises. It is expected that roughly 5 percent of the EU market for high-value winter vegetables can be achieved over the first three years, increasing to perhaps 20 percent when full production is reached in the latter years.

This success is based on increasing expertise in training programs, shipping, selection of crops, and other factors that are incorporated into the Model/Satellite Farm Project.

Conclusions

The preliminary investigations reported in this section strongly support the concept of incremental development of a vegetable production enterprise combined with training and comprehensive marketing guidance. These investigations have also made clear the importance of a thorough feasibility study. Despite the amount of work already accomplished, many factors must be examined and evaluated in greater depth and detail, although an excellent base and direction have been established.

Section IV.

COST SUMMARIES

SUMMARY OF CAPITAL INVESTMENT ITEMS
(Preliminary estimates)

Item	Cost
Farm Machinery and Equipment	\$ 11 650,000
Facilities and Utilities	7,007,000
Site Work and Miscellaneous Infrastructure[*]	5,974,000
Repair Shop Tools and Equipment	37,000
Office Equipment	45, 000
Total	\$14,713,000
Contingency @ 5%	735,650
Grand Total	\$15,448,650

NOTE: Following tables show breakdown for Facilities and Utilities Site Work and Miscellaneous Infrastructure.

SUMMARY - FACILITIES AND COSTS OF UTILITIES

Item	Cost
Temporary Housing	\$ 50,000
Management Housing	1370,000
Administration Building	110,000
Garage and Repair Shop	125,000
Pesticide /Fertilizer Storage	50,000
Packing Shed	185,000
Cold Storage Facility	1,904,000
Equipment Shed (Model Farm)	72,000
All-Purpose Sheds (satellite farms)	324,000
Decontamination Pit	7,000
Domestic Water System	365,000
Reservoir for Irrigation Water	2,332,000
Standby Generator	200,000
Furniture and Fixtures	138,000
Communications	25,000
A/E Fee	300,000
Subtotal	\$6,557,000
Perimeter Fence(optional)	450,000
Total (facilities and utilities, with perimeter fence)	\$7,007,000

SUMMARY - SITE WORK/INFRASTRUCTURE COSTS

Item	Cost
Site Work (other than farm land):	
Parking Area at Office	\$ 10,000
Roads and Streets, Primary	1,454,000
Roads and Streets, Secondary	486,000
Landscaping at Housing and Office Areas	5,000
Electrical Distribution	225,000
Total	\$2,180,000
Site Work (farm land):	
Land Leveling and Grading	\$ 940,000
Irrigation System	2,583,000
Windbreaks	126,000
Total	\$3,649,000
Miscellaneous:	
Fuel Storage and Dispensing	\$ 75,000
Sorting, Grading, and Packing Equipment	60,000
Gathering Bins and Containers	10,000
Total	\$ 145,000
Grand Total	\$5,974,000

