A Brookings Forum Sponsored by the British Embassy and the Brookings-SAIS Project on Internal Displacement

THE IRAQI MARSHLANDS: CAN THEY BE SAVED? ASSESSING THE HUMAN AND ECOLOGICAL DAMAGE

The Brookings Institution
Falk Auditorium
May 7, 2003

Welcome:
STROBE TALBOTT
President, The Brookings Institution

Moderator:
THE BARONESS NICHOLSON OF WINTERBOURNE
Member, European Parliament

Special Guest:
ANDREW NATSIOS
Administrator, U.S. Agency for International Development

Panelists:
PETER CLARK
Chief Executive Officer, Amar International Charitable Foundation; Co-editor, *The Iraqi Marshlands: A Human and Environmental Study* (2002)

MOHAMMED JAMA
Regional Coordinator, World Health Organization, Cairo

PETER GALBRAITH
Professor, National War College; Former U.S. Ambassador to Croatia; Former Iraq Expert, Senate Foreign Relations Committee

THOMAS NAFF
Department of Asian and Middle Eastern Studies and Senior Research Fellow, Institute for Environmental Studies, University of Pennsylvania

VICTOR TANNER
Consultant on Humanitarian Issues; Faculty Member, Johns Hopkins SAIS; Co-author, "The Internally Displaced People of Iraq" (Brookings report, 2002)

MR. STROBE TALBOTT: Good afternoon everybody. I'd like to welcome all of you here today for what I think is a particularly timely and important event.

This use of the Falk Auditorium, and I can't imagine putting it to a better use, is co-sponsored by the British Embassy, and our thanks to our colleagues from the British Embassy, and the Project on Internal Displacement which is a joint undertaking of the Brookings Institution and our neighbors and friends at the Johns Hopkins School of Advanced International Studies just down the street.

In thinking about how to introduce the topic that we're going to be discussing this afternoon I had a little help from my friend Rich Kauzlarich who is sitting in the second row here who was a colleague of mine in the government for eight years. Rich is at the U.S. Institute for Peace. He's worked a lot on the problem that we're going to be talking about this afternoon. He came over here today and said that this is a truly awful but important problem, and I'm sure all of you because you're here, agree.

The forced drainage of the Iraqi marshlands presents not just an outrage, but a particularly poignant travesty of history, of human civilization, and of nature.

It's hard to imagine the abuse of power by a regime causing more different kinds of devastation. In this case that includes the willful crushing of a 5,000 year old civilization; the displacement of nearly 200,000 Marsh Arabs; an ecological assault that has turned a lush wetlands, which by the way was thought once upon a time to have perhaps been the inspiration for the Garden of Eden, into a wasteland.

Now the question looking to the future, obviously, is how to remedy this human, social and environmental catastrophe and how also, as we look ahead, to assess the impact of possible oil exploration on the region. That's the subject of today's discussion.

I want to thank on behalf of all of my colleagues here at Brookings, and I think on behalf of all of you as well, the co-directors of the Displacement Project and the organizers of this event -- Francis Deng, a representative of the United Nations Secretary General on Internally Displaced Persons, and I'm proud to say, a Non-resident Senior Fellow here at the Brookings Institution, and Roberta Cohen, who has become a particularly close friend and colleague of mine in the year or so that I've been coming to Brookings, and since I've been here since last July. She is, of course, a Senior Fellow at Brookings and one of the world's most renowned experts on the subject at hand.

I also want to thank our special guest, Andrew Natsios, the Administrator of USAID, who will come up to the podium in a moment and open the discussion.

I want to express a word of appreciation to all of the panelists who have taken some time

out of a busy day to participate in today's forum.

Finally, I want to offer a particular welcome to our moderator, The Baroness Nicholson of Winterbourne. She served in the House of Commons for ten years. Since 1997 she's been a member of the European Parliament. While in Brussels she has been the rapporteur for Iraq. In that capacity she has closely monitored Saddam's oppression of the Iraqi people in general, and the Marsh Arabs in particular. Last year she co-edited a book with Peter Clark, another of our panelists, called *The Iraqi Marshlands: A Human and Environmental Study*.

I might just add before turning the program over to Mr. Natsios that Emma, as she has asked me to call her, the Baroness, showed particular dedication in coming here today. If I'm not mistaken, she left Iraq day before yesterday on a UN convoy bound for Kuwait. Then after just a few hours of sleep she boarded a plane for Washington with a long layover in London, and got into the Cosmos Club up the street here at about 10:00 o'clock last night. So when we finish all the other proceedings of the day perhaps you can give some of us a seminar on how to cope with jet lag. But we thank you very, very much for being here.

Mr. Natsios, if you would be kind enough to get the program underway, and we once again welcome you in particular for being here.

MR. ANDREW NATSIOS: Thank you very much.

I first want to say, frequently when I go to events or meetings of this sort I am among people who I'm at least not an expert with but almost an expert with the people in the audience. In this case I'm not. So I'm a devotee of the Marsh Arabs, frankly because I love Wilfred Thesiger's books. I've read all of his books many times, but the most evocative and the most beautiful one in my view, other than *Life of My Choice,* was his book *The Marsh Arabs* about the seven years he spent among the Marsh Arabs between 1950 and 1957. I re-read parts of it just before the war started.

I was moved by the beauty of the book, and if any of you haven't read it you ought to read it. It's an explorer's book, a travelogue. It's not a human rights book. But he was a devotee, as I am, of traditional cultures and was -- he died a few years ago -- was horrified as I have been at the destruction of traditional cultures by modernity, but more maliciously when there's been a deliberate planned, organized effort to destroy them which was the case with the Marsh Arabs.

So that's my personal interest in it, and we began research on this last fall just to do some initial research on the base of data that was available in the United Nations, in Europe, in the United States in the scholarly community and within AID itself, of course, because AID has 40 years of experience around the world in the environmental area and in the human rights area and in the internally displaced area. Roberta and I do share some expertise on the plight of internally

displaced people around the world among which the most brutalized have been the Marsh Arabs.

The marshes of southern Iraq were the largest wetlands in the Middle East, and as you all know for 5,000 years the Ma'dan or the Marsh Arabs lived in this area tied to the environment through hunting and fishing and the cultivation of rice and barley, and Wilfred Thesiger talks, of course, about the wild boar which are the principle predator that he had to shoot constantly because they would go after people. That way of life, that evocative way of life he describes has been not entirely destroyed, but pretty close.

Since the '50s there have been at least 32 dams built on the Tigris and Euphrates river basin; another 20 or so are either under construction or planned. The destruction of the marshes and the people who lived in them accelerated rapidly after the first Gulf War. Saddam, as we all know, went to great lengths to build canals and drain the waters in order to punish the people of the marshes after the Shi'a uprisings in the early 1990s. His soldiers reportedly killed tens of thousands and some estimates are as high as between 50,000 and 100,000, burned their communities to the ground, poisoned the water, destroyed the livestock, and planted unmarked land and water mines throughout the region.

The population numbered more than a quarter of a million in 1990, according to some estimates, and may have been reduced to 20,000 or 40,000, although I understand Baroness Nicholson just told us there may be as many as 200,000 in the remaining marsh on the border between Iraq and Iran which is very good news indeed.

Many live as refugees in Iran. Another 250,000 are internally displaced. And as you know there's been great discrimination beyond just the Ba'thist party within Iraqi society tragically against the marsh people, so they are particularly among the most oppressed of the social order in the country.

The marshlands cover what remains of 15,000 or 20,000 square kilometers. Now they extend to less than 2,000. The central marsh has been reduced to three percent of its original size and Al Amara Marsh is down to six percent. Only the Al Huwaizah Marsh along the border with Iran remains sizeable. Even that has been reduced by two-thirds.

There has been, to be fair, a relationship between the decline of the marshes and the damming of the water basin both in Syria, Turkey, and Iran, and in Iraq itself. So some of this was a natural function of development and another was a deliberate, systematic attempt to destroy the marshes by the regime and the Ba'thist party.

The questions we must deal with first are what can be done about this? First, we have to be realistic. Neither the Tigris nor the Euphrates Rivers carry as much water as it did into Iraq 15 or 20 years ago. We all know that. The question is of course what that water flow volume is at

this point. Turkey, Syria and Iran have control over the headwaters and control that through the damming system that has been built over time.

Iraq's population has continued to grow over the years and the demands of people who live in the upstream affect profoundly the marshes and the downstream, the worst place to be in the case of marshes, as you know, is on the downstream where you don't control the headwaters.

There is no international agreement or comprehensive river basin plan for managing the Tigris and Euphrates river system nor is there a mechanism for balancing Iraq's competing claims on these waters and the land that depends on them.

The marshlands have been closed to outsiders since 1988. I know some people have managed to get in, but we have not had the freedom of movement by objective international observers to see what conditions are, to measure the hydrology of the system, to make some comprehensive assessments that are precise and that there's general scientific agreement on.

We also know there are experts within the Iraqi government who are people of high standards and high ethical principles who will be supporters of efforts to deal with this issue.

No one knows for sure how the soils have been affected. We know there's been a salinization on a massive scale, but there has been enormous damage. The hydrology and the ecology of the wetlands are extraordinarily complex and extraordinarily delicate as well.

We know the controversies that have been around the attempts and the plan to restore their everglades which will never fully be restored to what they were. But this issue will not go away, it is there, we are looking at it now and we certainly need the expertise of the people in this room, in the international community, international institutions, and within Iraq itself, particularly among the people who live in the marshes. These marshes, after all, are their homes -- the ones who are left.

The question is what do we need as sort of general operating principles to look at this issue? And I want to conclude with these remarks because I know time is limited.

The first is we should design a process that includes Iraqis at every step and which can resolve the social, political and institutional issues related to resettlement, property rights, economic opportunities, and social safety nets.

Two, we need to establish a reliable database that is commonly accepted among the scientific community within the country and outside the country so that we don't have debates over technical issues. We're going to have enough debates as time goes on, on what to do. The question we need to deal with is a baseline of data so at least that's reasonably settled. So we need to do a set of technical surveys as a basis for programming in the future.

Funding immediate interventions to manage and protect what marshlands that do remain is important. Restoring the destroyed areas through targeted and rehabilitation pilot projects. The next principle is creating partnerships with other donors and with other international institutions, the private sector, and with of course the NGO community which I come out of. I think that's very important.

Training Iraqi scientists, officials in the new government, environmentalists, and the Marsh Arabs themselves in wetlands management beyond the skills they already have, and they certainly have skills. But we have learned for example in AID a lot about river basin management across national boundaries. AID has extensive experience in this in Latin America, in North Africa, and now in the Lumpopo and the Zambezi River systems in southern Africa where we've done work over decades in terms of negotiating inter-country agreements on the sharing of water, on the collection of data, and other elements of watershed management.

Finally, we need to form a broad-based scientific coalition to work together on issues and research. Any plan would have to include the riparian countries of the Tigris-Euphrates river basin for without their cooperation we're not going to have much success over the longer time, but there are some things we can do to begin to look at this problem.

I actually postponed a trip to go to Canada which I am to leave for in about three minutes, because I postponed my trip once to attend this so I probably can't stay very long. But thank you for inviting me. We're with you on this. We need technical assistance. John Wilson's right here. He is a career officer from AID. He's got the beard and glasses, a very handsome guy with thinning hair. He is our technical expert here who's been doing research on this issue. We've had some help from one of our panelists as well this last year.

So thank you very much, and thank you for doing this.

[Applause]

THE BARONESS NICHOLSON OF WINTERBOURNE: Thank you very much for coming. It's my pleasure to introduce the panel this afternoon and to invite them to speak.

A couple of words in the wake of Andrew Natsios' excellent speech. The situation that we all thought was correct about the marshes was of course in most instances taken from fragmentary data that had come to us from marsh people who had escaped, the bulk of whom are in Iran, and also from satellite

photographs and from desultory visits that a few of us managed to make, myself included, over the period of time that the marshlands was under drainage.

I've had the good fortune of having eight days there in the wake, may I say, of two outstanding programs on the marsh people which really put them on the map by David Marash and by the ABC team. Thank you so very much indeed for quite exceptional, outstanding work which brought this topic in front of everybody well before the hostilities commenced. David, it is wonderful.

The key, however, is that there are many more people alive and in the marshes -- not well, not happy, not where they ought to be. Twenty thousand families, the tribal leaders told me, have still survived. One village I went to had 10,000 people in it. Massive. So I think the figure from the marsh people themselves of around 200,000 in the marshlands still, misplaced, bullied, tormented, and really very badly treated. Nonetheless, I think 200,000 may very well be a ball park figure we can work with. Then there's at least 50,000 inside Iran that David and I were filming recently.

So there's a whole great group of people and I think my benchmark is that it is those people to whom we must listen. It is those people whose land and territory and farmland this is. And curiously, the people themselves were among the most productive in the food chain of Iraq. What Saddam actually did was willfully and malevolently destroy a major portion of food production of Iraq. So this is rural regeneration and fishing regeneration of a wide variety of products that were produced and marketed over 5,000 years in a self-sustaining, mixed farming economy of the type and style that we all wish still survived.

It did, and it does, but it has been reduced to a very low level. So the people themselves must be the key, the leaders, they are the ones with the knowledge. Saddam ensured that all of the papers they had were burned when he burned their houses and their farms, so it's all in their heads.

Again, another comment, it's not just a question of water. Talking to the tribal leaders, they had massive land platforms. It was an artfully, man-created system over 5,000 years which kept a wide variety of products being successfully farmed and harvested every year and sold throughout the Gulf and inside Iraq.

So it's a greater challenge, but in some ways I think there's a much greater possibility of helping those people return to their own productive way of life.

Could I now introduce our next speaker who is going to be Dr. Peter Clark who is the CEO of the Amar International Charitable Foundation. Peter is hugely knowledgeable on this issue. He's been working on it for a number for years now. He's a former Senior Member of the

British Council with a lifetime of experience in the Arabian Gulf.

Peter?

MR. PETER CLARK: Thank you.

It was very reassuring to hear Mr. Natsios' words of his commitment and interest in the area of the marshlands, the southern marshlands of Iraq.

I want to say just a word or two reinforcing what he said about the uniqueness of the area. The area is about 20,000 square kilometers and in its hey-day there was a population of around half a million. The area near the confluence of the Euphrates and the Tigris was always remote from political centers and it became an area where it was very difficult to penetrate. There were no roads, and it became an area of fugitives from the government and also bandits and smugglers. There was a colorful, almost self-dependent heroic life there. This is superbly described in Wilfred Thesiger's book which Mr. Natsios referred to.

Generally speaking they were Shiites and they were tribal. And I mentioned they were always slightly awkward customers with regard to governments. After the Gulf War in 1991 the revolt against Saddam started very much in the south and in the marshlands area and the consequence was as Mr. Natsios and Emma have just said, was a repressive response on the part of the Saddam government and an ecological crime in draining the marshes. This was punitive and it destroyed the economic base of a way of life of these people. It attacked a unique wetlands which had remarkable species that do not exist anywhere else. Some species, such as certain kind of otter, are destroyed forever now.

In '91, as I say, the revolt took place and there was a lot of attention on the north of Iraq but not so much on the south. Emma Nicholson was in the area and saw the need for the people of the marshlands, the Marsh Arabs, to have a friend in international circles. She founded the organization of which I am Chief Executive Officer, the Amar International Charitable Foundation which has been devoted primarily to the delivery of public health and educational services to the people of the marshes. Many of them then fled Iraq and went into the Islamic Republic of Iran. But for the first few years in the mid '90s Amar was providing services inside Iraq, inside the marshlands. Mobile clinics on boats and various other kinds of services. But most of our work, as I say, is in a number of refugee camps in Khuzestan in the area of Iran closest to the Iraqi border.

But in addition to our humanitarian work we've also been involved in advocacy of the interests of the Marsh Arabs and we've also been interested and we've been able to secure

international authorities on the subject. We've been interested in the environmental damage. And throughout our work we've seen an integration of the environmental and the human.

In '94 we produced a report on the ecological damage done to the area and in the year 2001 we produced another report which was then re-edited and became the book that has been referred to, *The Iraqi Marshlands: A Human and Environmental Study*. In this book we called on experts from all over the world. There's a Russian economist from the States, people from France, Cairo, Iran, Iraq. We got the best people to talk about different aspects of it. We also used satellite imagery to monitor the progressive degradation of the marshes. We also managed to have a social survey among the refugees in Iran.

Our work I think has a number of unique features, the work of Amar International Charitable Foundation. In the camps and in our work we don't employ expatriates, that is people from outside the area. All our 300-plus employees working as doctors, teachers, and so on, are either Iranians or mostly Iraqis. We look at the refugees not as victims, but as partners and we're hoping to be able to go with them back into a free Iraq.

We have, as I say, over 300 people employed with us, and we aim to be culturally sensitive in this matter.

Looking at the future there are many ideas and schemes and we're interested in being involved with them. I would wish to say our interest above all is that you can't separate the environmental from the human. You may be able to reflood the marshes but what's that for? It's for people. And there are, as Emma has said, 200,000 people there now. Somehow you've got to regenerate economically and socially a way of life.

I think the economic development is most important, and I think any work on developing the marshes has to look at economic self-sustainability such as the restoration of fisheries and agriculture.

The long term prosperity of the region is secure. There is oil in the area. But above all it seems to me, and this is something that we will constantly advocate, it's the paramountcy of the people themselves. Their needs and interests have above all to be consulted in any arrangements for the future.

Thank you.

BARONESS NICHOLSON: Peter, thank you very much indeed.

[Applause]

BARONESS NICHOLSON: Now I'm going to introduce my very good colleague Dr. Mohammed Jama and tell you that he's my boss. I'm the World Health Organization Special Envoy. I have no medical qualifications of any sort, so I'm his mouthpiece on non-medical matters which enables me to say how glad we are to have you and to thank you very much for coming.

Mohammed, you're going to talk I know about the needs in the new Iraq of people of minorities, of special needs, who have been especially oppressed and how as we all move on to try to assist Iraq, how we get those people's needs incorporated into the new system.

Could I ask you to speak?

MR. MOHAMMED JAMA: Thank you very much, Emma.

I would like to, as Emma said, take the issue of the Iraqi marsh from a different angle and see the future, how they can be integrated into the new Iraq and how their problems are going to be addressed. But because of the particular geographic situation where these people live, what does an organization like WHO know about people and minorities or indigenous populations in the world, and particularly in Iraq, and people who normally live between countries or bordered areas.

Our experience shows that these people are often neglected. They are the last to be served. If you recall, the small pox eradication, the difficulties that WHO and the international community had, was the eradication of polio in border areas between Ethiopia and Somalia because these people were not falling into any of these territories. The national governments of both countries were actually not giving proper attention.

Now the world is fighting against polio. There are only about ten countries reporting polio cases. And what we know in Iraq, and in fact in the last few weeks that our colleagues in the health of Basra and also some of the NGOs and WHO Unicef, there are cases that are being reported from this particular area and what is very interesting is how the new government is going to address their needs.

Our concern is that health being a fundamental right, and access should be assured by both the national government and the communities themselves, to make sure that proper national policies are developed addressing those who were marginalized and have been suffering a heavy burden of disease in that particular country.

Iraq has spent very little money on the social sector. In 1989 they were spending $22 per capita. If you compare with the neighboring countries who were spending $80 to $120 per

capita, you can imagine how little public health service was there in those areas, particularly in the south.

It is also very important to understand how the health system was structured. It was mainly [curative] health services, the public health services [inaudible], immunization services were operational however the public health service and the hospitals and the health centers were mainly concentrated in urban areas. Access has been low in most of these, in the Marshland Arabs.

Now the distribution of resources even during the Oil for Food program is something that not many of you may know about under the security Council Resolution. The focus has been in the north, and also in the south and in the center but it didn't cover mainly the needs of the people in the border areas because it was being managed by the regime at the time.

What are we telling now the new Iraqis who are now going to come into power, and the people that we are talking to, the Iraqis both inside Iraq and outside Iraq? They have to have the health policy right. They have to develop financial mechanisms that are fair and are also affordable to the poor people of Iraq in the marshlands. They have to address the public health needs and involve the communities who are vibrant communities who can determine and also engage in the discussions of how their health needs are going to be determined. A decentralized management is what we are going to advise to the new government, that the districts are autonomous enough to develop their plans and their needs while there will be a national policy that will guide the overall construction of the health system of Iraq.

WHO as an organization has a mandate and there are resolutions from the assembly of the organization that request the secretariat, in this case the staff of the WHO and the Director General, Dr. Gro Harlem Brundtland, to particularly address the health needs of the what we call indigenous populations and minorities, and I think the Marshland Arabs fall into that category.

Our office will make sure that we bring this to the attention of our partners in the aid community and also within the UN system.

A country that's going through a transitional period as we in the medical field describe a double burden of disease -- both communicable and non-communicable diseases. But clearly and obviously the people who are living in the marshland areas are mainly affected by communicable diseases that can largely be prevented through public health services. This is what WHO is going to promote and address within the national health context.

So in the changing situation of Iraq what we are hoping is that the new government will take on board all these concerns and all the problems that the population of Iraq have faced during those times and put that into a national context. Surely the needs of these Iraqis cannot be

addressed separately at a time when the country has to go through reform and reconstruction and we are hoping that all the Iraqis including the Marsh Arabs will be addressed by the new regime as a [inaudible] and a free Iraq.

Thank you so much.

[Applause]

BARONESS NICHOLSON: During my visit last week, I came back yesterday from southern Iraq, I had the pleasure of seeing the WHO team up and running there. But I also had the sadness of seeing the epidemics that you've described a bit, some of the diseases and miseries you've just touched on. The amount of work to be done is vast. And as you so rightly say, the new government is going to have a lot on its plate in terms particularly of the minorities, which we see on that tribal chart there just as one province of various tribes. Iraq is a country made up of minorities. That's just the tribes of one province.

I'm very delighted to call Victor Tanner to speak. Victor is a real expert on internally displaced people in Iraq. He's written a magnificent paper that we have outside with a scarlet cover which I commend to everybody.

Saddam Hussein seemed to specialize in the sort of Stalinist type technique of using forced people movement as a weapon of control, and I am pleased to have been alerted in the last few days in situ to a new couple of hundred thousand of internally displaced people for Victor to think about.

But the problem of relocation, coming back home again, is not just a problem of refugees. It is the problem of many many hundreds of thousands of people who Saddam deliberately manipulated to move from their homes, destroyed in terms of family life many people, and in fact made absolutely sure that they were scattered across the country.

Mohammed has touched briefly, all too briefly on the health issues of Iraq, but just to give you an example of the sheer cruelty of the system, the doctors salary has come directly from the tiny amounts of patients who can pay. When Saddam Hussein sentenced you to having your ear chopped off, for example, if you were facing him, when you went to the surgeon if you could find some money the surgeon agreed to chop less off; if you could find more money the amount he chopped off got smaller and smaller. The cruelty went down to that minute detail.

Victor, perhaps you can give us your insight into what you think is happening and how on earth the world can help repair the damage.

MR. VICTOR TANNER: Thank you very much.

I'd like to talk a little bit about displacement and prospects for return of the Marsh Arabs. Perhaps to start off with I can just touch on the numbers very quickly.

Peter indicated quite rightly that in the '50s and '60s anthropological studies indicated there were about 400,000 Marsh Arabs. In the course of those decades those numbers dwindled to about 250,000 at the beginning of the '90s. Part of that was the result of a natural process of rural exodus, of people moving to the towns for better services, for jobs and so on.

In the report that John Fawcett and I did for Brookings on internal displacement we came to the conclusion that 40,000 to 50,000 people had become refugees in Iran and only about 20,000 to 40,000 remained in the marshes. I'm delighted to hear that that number seems to be off.

So I would indicate there may be 200,000 people still in the marshes, but many of those may be people who are displaced within the marshes because we know of the extent of environmental destruction and it's just not possible that the population that was there at the beginning of the '90s, at the beginning of this campaign of massive force displacement launched by the Saddam Hussein regime would have left so many people in their original places. So I think there's a lot of scope for better understanding who is there, where they are, and where they came from including the people who are still in the marshes.

Now if I may talk a little bit about returning, because I don't want to go over time. I think to begin with what's important to say, and this is true for return throughout Iraq, of displaced Kurds, Assyrians, Turkmen, Suni, Arabs too. What is important is the return of the land to the people, not necessarily the return of the people to the land.

Not everyone may want to return to where they came from, but everyone has a right, if justice is to be done. Everyone has a right to either return or to some form of compensation. This will be extremely hard in the Marshlands because there is very little documentation on what land belongs to whom, and indeed, much of the land was communally owned. Furthermore, the Iraqi state did not reach into the marshes the way it did into other parts of the country and therefore the documentation is just much thinner on the ground.

Some factors to keep in mind when we think about the return of the Marsh Arabs. The first is the feasibility of reflooding the marshes. Andrew Natsios touched on that briefly.

Secondly, one has to remember that the Marsh Arabs, a marginal population, Shiites, were a downtrodden and marginalized group within Iraq before the Ba'th came to power, while

the Ba'th were in power, and they will continue to be marginalized in the new Iraq if efforts are not made to change this.

A third point, and that is that the Marsh Arabs are a very disparate group and there will be very different voices coming from the Marsh Arabs. You have refugees in Iran, you have people who are displaced outside of the marshes, you have people who are displaced within the marshes, you have people who never moved, you have people who moved to Baghdad in the '50s and '60s. All these people have different views. And it's also safe to say that these views will change over time in the new Iraq. These are the views I think as Peter indicated very clearly, these are the views that must be listened to and it's not easy to hear their voices, the voices of the Marsh Arabs.

A further point, and that is, it comes out of the books of Thesiger, of Gavin Maxwell, of Gavin Young, these sort of traditional books on the Marsh Arabs, is that already in the '50s and '60s there was a dissatisfaction amongst the Marsh Arabs, the younger generations, with their elders. So there are tensions within Marsh Arab society that one must be aware of.

So all these factors must be taken into account when one thinks of the return of the Marsh Arabs.

What can we do? I think just to begin with what the international community can do. What the international community should focus on is A, the technical feasibility of reflooding the marshes, and that's started. And B, promoting the voice of the Marsh Arabs. They will truly be the voiceless of the new Iraq.

What it is not up to the international community to do, and that is to determine the political desirability of reflooding the marshes. That is up to the new political institutions of the new Iraq and indeed to the Marsh Arabs themselves.

Having said that, what can we do practically? One thing is the immediate needs -- water and health. And if the population is indeed 200,000 those needs are greater than we would have thought.

Secondly, contract a survey to find out what are attitudes and opinions amongst the Marsh Arabs throughout Iraq and in Iraq. Set up an information center in a place like [Portanau] or in An Nasiriyah, in the big towns that are around the marshes, in Basra, where Marsh Arabs can come and find out. Many Marsh Arabs do not know what the marshes are like today.

Another thing that could be done, that should be done, is to identify advocates within the new Iraqi authorities so that it is someone's job to advocate for the Marsh Arabs within the new Iraq. This should be done at the federal level in Baghdad, it should be done at the provincial

level, the regional level in Basra, and at the provincial level in the various provinces that cover the marshes.

In conclusion, three points. One, I want to reiterate the idea that the Marsh Arabs are a very disparate group. They should not be held hostage to some romantic notion of a return to the Garden of Eden. We must know what individual Iraqis who came from the marshes, Ma'dan, what they want and whether they want to return, and if they cannot return what compensation they can get.

Secondly, oil and marshes do not mix. We know that from experience. There will be strong incentives for the new Iraqi government to run roughshod over the Marsh Arabs and not to represent their interests.

That brings me to my third point which is I think is a very important point. One of the only places where the international community and particularly the NGO community can play a role is to bring a voice to the voiceless because I think the Marsh Arabs will truly be a voiceless community within the new Iraq if we're not careful.

BARONESS NICHOLSON: Thank you very much indeed.

[Applause]

BARONESS NICHOLSON: We'll return to your points in a moment with questions from the floor, but we have two final speakers, two very distinguished speakers.

First of all, Peter Galbraith. Peter's just spent a fortnight in Iraq. Peter?

MR. PETER GALBRAITH: Thank you Emma, very much.

I was there for three weeks with ABC News. The job of being a news consultant is a terrific one and with Dave Merash here I think I'll just share a brief story which is that we got into Baghdad about six days after the American Marines arrived. There was no authority whatsoever in the city. We went out to Uday Hussein's house, Saddam's son, and recovered documents, did some filming. And as cameramen are wont to, they wanted to get a broad panoramic sweep so they climbed up on a garden shed with the sound man and they were filming from there.

A couple of days later we learned that that garden shed which had been filled in with cinder blocks had 425 million dollars in it. I can tell you, Dave, after talking to the sound man and the cameraman, I can assure you that had we been more curious, as the American Marines

were, and knocked through those cinder blocks, it would not have been the lead item on the ABC evening news. [Laughter] ABC might have become an employee-owned company, but that's a different matter. [Laughter]

What I'd like to do is just briefly discuss some of the political context in which this is taking place. In my judgment the last month has been actually a pretty catastrophic month in terms of building this new Iraqi government which is key to resolving some of the issues of the Marsh Arabs.

The Americans had a brilliant campaign, but then the next stage left looting that went on unchecked for three weeks in Baghdad, except for the Oil Ministry, so far as I know no other ministry escaped. All of them were burned and looted. Among them was the Irrigation Ministry which I visited, completely burned. Whatever records that might be relevant, hydrological records, are gone. The Iraqis did keep duplicate land records, but these I think are mostly gone or scattered. But beyond that, beyond the physical destruction of the looting which was in the billions of dollars, there was the psychological consequences of it in terms of -- I think it's true that almost all Iraqis were very happy to see Saddam gone and certainly maybe half of the Kurds and many of the Sunni Arabs were even happy that the United States had done it -- the authority of the occupying power of the United States in reconstruction was very much diminished by this orgy of looting and destruction and that is a significant complicating factor.

The other issue is who is the authority in Iraq? There are fundamental constitutional issues that have to be resolved, and while there is some discussion of it a lot of the discussion doesn't necessarily take into account the realities of what has happened in Iraq. In the north, for example, the Kurds not only have their own regional government, and they have the largest Iraqi army, maybe the only major Iraqi army. Much better well armed than it was before thanks to collecting the heavy weapons of the former Iraqi army. They control also all the territory they want. They are in one position.

In the south the mosques basically have filled the gap in authority and this includes the former Saddam City. It's been renamed El Saddar City in Baghdad, the large Shiite suburb. The mosques have taken over and there is of course a lot of conflict among different clerics as to who will be preeminent.

How will these developments affect the Marsh Arabs?

One of the questions that comes up, President Bush has spoken of federation, although his people on the ground have been cautious about using that term. I think inevitably you'll have a very federal or con-federal structure. I think Iraq can only survive as a voluntary union and that's going to mean a very weak central authority. But it also will present complications for groups that are minorities within the federal provinces, the federal entities. I think the old Iraqi

provinces will be scrapped.

So for example in Kurdistan the Turkmen, the Assyrians, the Haldians, but in the south what will be the relationship between whoever the authorities are in the reconstituted Basra Province and the Marsh Arabs and how will their rights be protected? And will that be something that the United States or even the central government in Baghdad will be able to influence significantly? These kinds of questions are very much unresolved.

Let me just add one other complication. Andrew Natsios talked about the neighboring states and the relationship to the water flow, but a federal Iraq also means that the provinces will control the water. What does that mean? The water flows through Kurdistan and there are large dams there. In their constitution, which they've actually already written, those natural resources belong to the people of Kurdistan, to the Kurdistan regional government. So what will be the water-sharing arrangement between Kurdistan and the rest of Iraq? And what about the intervening provinces?

So maybe that will be able to be negotiated amicably, but it is an additional complication in this whole process.

BARONESS NICHOLSON: Peter, thank you.

[Applause]

BARONESS NICHOLSON: As everyone knows, Peter's long been an expert on Iraq and it's really good to have you here today. Thank you so much. And thank you to Roberta for making sure you were here.

Finally we're going to turn to our water expert on the panel today, Professor Thomas Naff. Tom has long been an expert on Middle East water, on Gulf water, on that particular region. You have amassed the most extraordinary database I know, apart from everything else. I hope we see you in Iraq before too long. You will be a bit sad when you go because of course one of the key points of the destruction of all the records which is very tragic is that people's diplomas, people's scientific qualifications are gone. All the proof that a doctor was a doctor, a professor was a professor, all gone up in smoke. One of the worst elements, I think, is that the professionals have lost their capacity to prove precisely when and where they studied. All the school records, everything gone up in smoke in this orgy of looting and destruction.

So Tom, please give us your wisdom.

MR. THOMAS NAFF: Thank you, Emma.

I'm going to begin with a couple of self-evident propositions. Though they're axiomatic, they're fundamental.

First, basic one: water links us all to every facet of our existence. For that reason water is inherently a very important and very complex issue. Second: because of that complexity it's necessary that we approach water-related problems holistically. We must take into account all the various elements involved in a given water issue or set of problems, all of which will be reciprocals of and interact with one another.

For that reason when we talk about the importance of the marshes and the fate of their inhabitants, we have to take into account the relationship between the marshes and the two rivers that give them the residual life that they presently enjoy - that is, the Tigris and the Euphrates Rivers.

There is a direct ratio between the improvement of the condition of those two rivers and the potential for rescuing the marshes and returning their original inhabitants, the Marsh Arabs. We cannot ignore or undervalue the significance of the human, the animal, and the plant life of the marshes that, after all, constitute the core value of these wetlands.

I'd like to take a quick snapshot of the rivers and the marshes and then talk about the problems that confront the various agencies and people who are attempting to deal with these issues in Iraq.

The Euphrates and the Tigris rivers have not flowed in their natural state, that is to say relative full flow, for decades. Their regimes have been enormously altered in the modern era by the construction of dams and reservoirs and barrages and regulators and irrigation drainage projects that have been carried out in Turkey, in Syria and in Iraq. These changes have had a progressive, very powerful negative impact on the health of the marshes.

Generally speaking, the combined flow of the two rivers in Iraq, presently amounting to an annual average of between 47 and 49 billion cubic meters, would seem to be sufficient to satisfy the needs of Iraq's 25 million people, three quarters of whom live in the Tigris basin. In fact, however, serious shortages exist. Let me give you one important example. Agriculture along the Euphrates River requires an annual supply of about 21 billion cubic meters a year but only about 16 billion cubic meters is currently available. In fact the most recent figures I've received from Iraq from a usually reliable source, claims that the flow of the Euphrates River over the past year, has dropped to between 12 and 14 billion cubic meters, down from the normal average of between 18 and 20 billion bcm. The projection is for a continued reduction of flow in

the immediate future, due to several factors including poor management, decaying infrastructure, and the continued development of the GAP project in Turkey. It should be borne in mind that all the water in any watercourse in never available for use because a certain amount, between 20 and 40 percent, must remain in the river channel in order to enable the river to cleanse itself, maintain the health of it fish population and the health of the ambient ecology.

Any reduction of flow in the rivers means reduction in the flow of water to the marshes that would, in turn, mean that the progressive desiccation of the marshes would increase. The problem has become very urgent. Action has to be taken very quickly if the marshes are going to have any hope of recovery.

Moreover, it must also be borne in mind that the solution is not to cut all the floodgates, that is, all the hydro-engineering infrastructures, and allow the full flow of water to inundate the marshes. That would be, in some respects, very destructive. The process of re-hydration must be carefully planned and measured.

Let's look briefly at the marshes. The Iraqi marshlands are one of the most important extensive natural wetland ecosystems in Europe and in Western Asia. Their survival, which is vitally dependent on supply from both rivers, is presently in grave doubt

The Tigris and the Euphrates rivers have their own clusters of marshlands. The flood water of the Euphrates were responsible for the creation of the Lake Hammar marshes and those of the Tigris brought forth the Qurna and Huwaiza marshes - respectively, the central and western-most of the marshes. They are probably the only marshes left with enough viability to be rescued.

The rate of the shrinkage of the marshes in the past few decades has been alarming. Between 1985 and 1992 the marshes diminished by 43 percent. That is to say, only 57 percent remained viable. Today, judging from the last satellite photos that I looked at, dated 2001, I estimate that only about 16 percent of the marshes survive - and that 16 percent is in mortal danger.

The shallow waters, the fluctuating climate, and inconsistent, ever-declining flow to the marshes make them very vulnerable. The Euphrates and Tigris River systems are highly dynamic, meaning that their annual flows change from year to year, and within a given year can change rapidly from one season to another. That situation combined with mismanagement, poor maintenance, deliberate drainage and warfare have only magnified the fragility of the marshes.

`Their peril is heightened by the imminent exploitation of oilfields discovered beneath the marshes. There is no question that these fields, that are estimated to yield about three million barrels a day for the next 50 years, will be pumped. So the question is, will the oil be exploited in

such a way as to preserve the marshes, or at their expense?

Furthermore, should Turkey's GAP project - a very large hydro-agricultural project that is intended to irrigate about ten percent of the land mass of Anatolia - should that project be fully implemented without a fair and balanced water allocation agreement with Syria and Iraq, the reduction of the flow of water into Iraq could be so severe that Iraq could lose up to 60 percent of Euphrates water. Such a reduction would be a mortal wound to all but a small part of the marshlands. Proportionate reductions of Tigris water would complete the expiration of the wetlands.

What would be required to save the marshlands? Many tough actions. The rescue operation would have to move on several very difficult fronts simultaneously. Let me give you a few examples.

The necessary perception by policymakers that the marshes are of sufficient critical importance to generate the difficult political and economic tradeoffs that are required - for example, uprooting farmers and re-flooding agricultural land created out of former marshes.

The marshaling of domestic and international funds, expertise and technology necessary to accomplish the task. This will not be easy because of competition for the same limited pool of funds and expertise by other very urgent and legitimate recovery demands.

The Marsh Arabs will return to marshes that have become much smaller and different in quality than they were at the beginning of the '90s when they were scattered. (Though I learned from Baroness Nicholson just before the forum began that the number of Marsh Arabs who remained in the marshes is two hundred thousand rather that the ten to twenty thousand we were led to believe.)

Finally there is the time factor. If the marshes are going to be saved, the task must be accomplished at a rate greater than the rate at which the they are being desiccated and lost, and that's going to take a real effort.

These are the basic hydrological and other factors that are involved in saving the marshes. The question is, should they be saved? Absolutely. How should they be saved? That we can discuss in the question and answer period.

[Applause]

BARONESS NICHOLSON: Tom, thank you very much indeed.

We've got a very large audience today, which is a very great pleasure, and I think there may be a lot of people who want to ask questions.

Could I suggest that we take questions three at a time, and then I turn to the panel and whoever feels that they wish to respond does so. Will that suit everybody? Three at a time.

Perhaps not everybody answers every question, but the most suitable person picks up the question that fits a comment they want to match.

QUESTION: My name is Hassan Janabi. I came over from Iraq. I am currently living and working in Australia.

I don't have a question. I have a comment. Is that possible?

What I see, we Iraqis unfortunately, the fate of our nation most recently in the 20th Century has been decided outside Iraq. As much as I am happy and proud to see so many distinguished people getting together and talking about restoring the Iraqis marshes, I am also disappointed that I don't see any Iraqi on the panel. This is also a reflection that certain things, the Iraqi input has been overlooked in this respect.

MR. NAFF: What kind of Iraqi did you have in mind?

QUESTION: I think we Iraqis are capable of thinking loudly and sharing our ideas with others and we are also open and extend a friendship hand to other experts who share with us the same attitude, the same values, and I think this is very important and very close to the heart of every single Iraqi to see such assembly talking about the Iraqi marshes.

So what I have in mind, there is a lot of expertise, Iraqi expertise. The marshes are not only a technical aspect. We don't need all the technical solutions to the marsh areas. We've got the marsh areas are very important historically, archaeologically, culturally. These kinds of things we have all sorts of expertise, and expert Iraqis who can contribute and actually advance the very thing that we are talking about.

I don't know whether I answered your question. I am a water engineer with higher degrees in water engineering from different countries. I have been writing on the very issue for so many years, and basically in the Arabic press. I'm not trying to market myself, I'm sorry, but there are a lot of Iraqis who can contribute.

My contribution to this, I see three dimensions to the issue. National, regional and international. This is of course very classic type talking. But I see the most difficult dimension is the national, is the Iraqi dimension to the restoration of the marshes.

The first step on this road has been already done. That is the removal of Saddam's regime which was responsible for the destruction of the marshes. But we still have very big huge problems in front of us. We need to mobilize people. We need to -- the word embedded now is very famous -- make the issue of the marshes embedded in every particular program.

BARONESS NICHOLSON: Thank you very much.

QUESTION: Randy Shostack, I'm a reporter with EOS. It's the newspaper of the American Geophysical Union.

There is obviously a lot of growing attention to the issue of the marshes here and elsewhere. What I'd like to ask is how do you realistically assess the likelihood of restoring the marshes given all of the things that were talked about today, the need to consult the Marsh Arabs and others about their views on reflooding, the response and potential cooperation of basin nations, the difficulty in establishing a new government, and the existing and planned water projects, among other problems?

QUESTION: My name is Joe Motherall. I lived some time in the Middle East. I'd be interested in knowing the relative magnitude of oppressive behavior on the part of Saddam Hussein before and after the uprising of the Marsh Arabs.

MR. TANNER: A fair amount has been written on that. I would refer you to a couple of documents. One which a colleague of mine, John Fawcett and myself authored, and it's on the Brookings web site on internal displacement. And another one is a Human Rights Watch report that came out in January of this year.

Just a couple of things spring to mind. One is that the pace of repression and the forced displacement really picked up in the wake of the first Gulf War and the wake of the Shi'a Intafada in the south, and the lack of external support that it did not receive, if you will. Many deserters, many rebels, many people who had risen up in the towns of Basra, An Nasiriyah, and the other towns Najaf, Karbala, found refuge in the marshes. Definitely the fact that that happened was part of the impetus of the Saddam regime to do away with the marshes.

I think it's also, quite frankly, the oil reserves that lie under the marshes was part of that. It's also what states do. They dry up marshes, and totalitarian states do it more brutally than the rest of us. But think of the Pontine Marshes in Italy, think of our own marshes in the southeast here.

Another thing springs to mind, the way that repression was done was very striking. There

was a mixture of outright military operations with the use of mechanized infantry, of helicopter gunships; personal intimidation, the targeted killing of community leaders, torture, imprisonment, harassment; and bureaucratic repression, if you will.

Notably the fact that the Marsh Arabs were deprived, many of them of their right to the Oil for Food food rations. That was a huge factor in breaking up their communities and their society.

MR. GALBRAITH: If I could just, because Victor said something that I think is worth underscoring, and that is the legacy of 1991. One of the problems that we face in the south of Iraq is that people remember well the first President Bush calling for the uprising on February 15, 1991, and then when it took place taking steps that permitted the Iraqi forces to put it down, permitting Iraq to use tanks against the Shiites and to use helicopter gunships. The same thing happened in the north but then, if you will, he redeemed himself by the intervention creating the safe area that became the basis for this de facto Kurdish state. So there's none of that problem there.

But it is a big problem in the south, and it is that legacy of mistrust which is one of the reasons that the Islamic parties now have such strength in the south. Another problem is the fact that there's been no other alternative leadership in this dictatorship. They're the only people who have come in and filled the vacuum.

That has another implication because if you talk to the Kurdish leaders and Talabani said this in an ABC interview. If in fact you end up with a democracy and you have the majority voting for a Shiite Islamic state then the Kurds would leave Iraq. There would be then a partition. That is a looming problem, and that goes to the second gentleman's question. You asked many things, but when you talk about getting around to fixing these problems in the marshes, well I would simply say there's a huge amount of political and constitutional issues to be sorted out, including the question of whether in fact the country will survive as a single country.

On that point, you talk to Iraqis -- You talk to the Kurds and basically in their heart no Kurd wants to be part of Iraq. You talk to the Shiites, although they are Iraqis and they think of themselves that way, their primary identity is at this point, is as Shiites. I marched with the people going to Karbala for [Ashura]. What they were saying is the Shiites should rule Iraq. We're the majority. It's our time.

Again, that just comes to the point that there's a lot of politics that's going to have to be sorted out before a lot of these other questions are going to be addressed and that will affect the whole process of reconstruction and rehabilitation of the country.

MR. NAFF: One comment inspired by Mr. Galbraith's reply.

I think we should bear in mind that the issues that have been spoken about today, including the marshes, are essentially international in nature. The waterways are international and the political issues involved are international.

No government can provide the essential social services necessary for the stability and well-being of a population without the capability to deliver sufficient quantities and quality of water. If the water source is international, then that requires effective allocation agreements among the riparian states that share that water.

In the case of the Tigris and Euphrates Rivers, for Iraq, having sufficient water supplies depends essentially on agreements with Turkey. Issues concerning the rivers and marshes must be placed in the context of the international relationships issues of the marshes and the rivers themselves. So that these issues, the marshes, the rivers themselves, all have to be placed within the context of international riparian relationships. About 90 percent of the Euphrates originates in Turkey and about 64 percent of the Tigris. What the Turks do with that water is the prime determinant of what happens downstream.

The Turks have promised that they would deliver at least 500 cubic meters per second of Euphrates water downstream. Turkey claims that rate is the natural flow of the Euphrates river. The Syrians and the Iraqis argue that no, they've got to have between 750 and 850 cubic meters per second and insist that's the natural flow.

Well, both sides have a basis for their claim because of the dynamic nature of that river. But in a situation where the riparian nations on a watercourse are hostile to one another - in this instance the Syrians and the Turks and the Iraqis and the Syrians (Iraq and Turkey have had a friendship treaty since 1946) - it becomes difficult to arrive at a rational, fair and balanced allocation of water. A sustainable allocation and use agreement on the waters of the two rivers is going to be essential not only for the recovery of the marshes but for the economic development and social recovery of Iraq itself. That is going to be a very important external determinant of whatever transpires within Iraq, one that must be kept in mind at all times.

BARONESS NICHOLSON: Thank you very much.

The issue of water is the absolute priority I'm sure is right. The WHO is concerned because water is the key element of the public health issue isn't it? A clean water supply, wastewater disposal.

The question of who is missing on the panel, how right you are. We have no Iraqi expert

on this panel. Nor in fact do we have UNESCO which for the UN system has the overriding responsibility for water in all aspects. I have written to UNESCO, I have written to the President of UNESCO, and invited him to suggest to UNESCO that the marshlands should be declared a world heritage site because that would at least give an umbrella. Marshlands both sides of the border. The Iranians have decided to restore their side of the marshlands. They are signatories to the Ramsar Convention which is the convention on water. Iraq of course was neither a signatory nor did it honor any of the principles underlying that convention as it used water as a tool of destruction against the people and against its neighbors rather than as a tool for public health.

The no Iraqi on the panel question is a tough one for us, and you're quite correct.

Speaking personally, I've been working hard to get Iraqis back inside of Iraq all of this week and last week and the previous week, as I see them as the real experts on this, and I cannot hope but say this despite other views. The real experts on this whole issue are the marsh people themselves, so they're the ones I believe we should respect beyond all else. They created the marshlands, they've sustained the marshlands, they made them productive, and they looked after them, nurtured, them and actually made them over a 5,000 year period. The marshlands are not just vast lakes of water, they are in fact, or were before Saddam bulldozed them, they were huge platforms of land on which various harvests could be made.

Mention's been made about salt. Salt has been a major harvest for the marshlands for the past 5,000 years, an unstated harvest in this particular dialogue so far.

So the complexity of the marshes is not just a vast body of water, it's actually an intricate system of productivity which sustained the best part of half a million people but also enabled them recently to provide one-third of the dairy produce for the whole of Iraq, to produce a fish harvest that was sold widely throughout the Gulf, to produce rice that was sold widely. Huge productivity. To recreate that is in the minds of the marsh people themselves.

So what I would like to have had here and didn't manage to achieve was a tribal leader. I did achieve a meeting with 30 or 40 tribal leaders four or five days ago in the heart of the marshlands in that particular province and have asked them to set up a committee so that they can start to guide and advise and I believe to lead on this whole problem. I'm absolutely sure that if we collectively come in from outside, do the analyses, make the decisions, then there will be a catastrophe because as you've already said it's about [inaudible] the people. Already we've found a quarter of a million of those people, all of them in one way or another off the land in which they were born, their grandfathers were born, and as one of them said to me, we go back to Sumerian days. We all [inaudible] here.

So they are the only people who know where those various different families have the right to go back and live. Even if it's only a few yards down the road which in many cases I think

it will be once the water is made available.

They can't drink at the moment. The British army is ferrying tankers of water into the marshland villages which have been rediscovered. So it's a humanitarian crisis at the moment and I think the process of the marshland regeneration, in my personal opinion, is a much more slow and delicate process than perhaps from outside we originally thought.

QUESTION: I'm Eliot Sorel. I'm a professor of health services management and leadership at the George Washington University School of Public Health.

I wanted to first thank Baroness Nicholson and the Amar Foundation for having kept this issue alive for more than a decade, and to Johns Hopkins and Brookings for organizing this gathering.

I also want to thank you for the fact that thinking as a doctor, I think the marshlands and the people in the marshes are really the clinical case for severe illness, that unless taken care of it will affect the survival of Iraq as a country.

The way I think of it is this way. That this is the first sort of index of the possible demise of the country as we know it. Because of Professor Naff's very astute analysis I do not believe that this region, this country will be able to survive unless the international community takes a very active role in negotiating the water resources for the whole region. Number one.

Number two, as it has been stated by Professor Naff, water in fact is the sort of medium from which all of us come originally, many millions of years ago, and that is holding us together. I think it has not only economic and political and public health implications, but I believe unless this issue is properly negotiated with the help of the international community, not left just to the Iraqis, the Syrians, the Iranians and the Turks to work it out, I believe it requires an active involvement of the large international community. I believe the survival and security of Iraq is at stake.

I'd like to hear some comments from the panel. Thank you very much.

QUESTION: Gary Mitchell from the Mitchell Report.

I want to ask a question that I will preface by saying that buried in today's Washington Post is a story about unhappiness in Afghanistan over the nature and pace of what we might call reconstruction. People not getting paid, etc. Which leads to the question of the political realities of the reconstruction period in particular in Iraq.

The question that I'd really like, you've spoken to this but I'd really like to see if we can

sharpen the focus a little bit and get a clearer sense of what are the scientific realities and the political realities of getting this job done?

QUESTION: John McCormick, I'm with the Energy Policy Center.

It's a question perhaps to Professor Naff but anyone on the panel might address it. You talk about the diminishing flow of the Tigris and the Euphrates and future new demands on the river, particularly from projects in Turkey. I think of the Oil for Food program soon becoming the Oil for Textbooks and Hospital Operating Room Equipment Program. A country that's mostly dependent upon food imports is going to have to become more self-sustaining, a greater demand for water for agriculture. Perhaps you might address that.

BARONESS NICHOLSON: Thank you.

Tom, I wonder if you could possibly just quickly in a very short space fill people in on the Ramsar Convention, on how on earth you get those who refused to sign it around the table to discuss water. In half a minute? [Laughter]

MR. NAFF: It takes half a minute to say Ramsar.

BARONESS NICHOLSON: How to get the international community to concentrate politically --

MR. NAFF: That's a tough one. The international community does not have a uniform interest or even capacity to deal with the issue of the marshes. The international community tends in the first instance to frame and act politically on international issues. Problems whose solutions lie in the realm of science, must somehow get past the political dimension in order to be effective quickly.

Fortunately, it is possible to move ahead scientifically to some extent even without having all the political issues lined up in a row. That is, essentially, what's going to have to happen. Often, if the problem is demonstrably critical enough, the scientific community is able to move beyond the obstacles of political questions causing the political community to move quickly to catch up.

That is why agreements like the Ramsar Treaty in which common interests are defined at least in part on scientific principles are important.

I don't know if I've answered your question about the scientific issue, did I?

Could you repeat the last question please?

QUESTION: I'm hearing you talking about diminishing flow, rate of demand from

Turkey, and then likely Iraq having to become more dependent upon its own agriculture to feed itself.

MR. NAFF: First, it isn't so much that the flow is diminishing, it is the availability of water that can be used that diminishes and that's to a large extent because of all the hydrological infrastructure and the various diversions of the water. That needs to be mitigated.

Iraq does sometimes receive very large amounts of precipitation, but over the long term it's too little to be food self-sufficient. The combination of climate, population growth, the inconsistency watercourse flow, the international quality of the river systems wherein riparian states are in competition for the water make it very unwise for Iraq to try to achieve either food self sufficiency or security. Iraq's most sensible approach to the issue of food would be a policy that combines domestic agriculture that does not stress the water supply and food imports. Such a policy would be good for the region as a whole.

The reason for that statement lies in the following statistic: presently, the per capita availability of water in the Middle Eastern and North African region is about 1250 cubic meters per person per year. Before the middle of this century, given the medium non-linear population growth projections, that figure is expected to decline to about 650 cubic meters per person per year. It makes no sense for any Middle Eastern nation to purse a policy of food security, as most of them do now.

MR. CLARK: In general I agree, but it's interesting to note that Iraq used to be an exporter of food. One interesting if minor fact is that it used to export barley to Britain in the 1920s. Barley which went towards the making of Guinness in Ireland. Among the many other things over the last 20 years there's been a degradation of public services, but there is still the potential. I don't know about self-sustainability and I'm not sure, again, whether it's necessarily in a global economy to be self-sufficient, but I think the potential is there.

One of the points that I stressed and I think we as an organization are stressing in terms of the Marsh Arabs, is that their future should be within the economic regeneration of the area, which is why we stress the importance of what the marshlands can produce, and that is agriculture and fisheries, and all other things, the development of the area should follow that. It seems to me that economic regeneration should drive what happens there.

BARONESS NICHOLSON: Peter, reconstruction.

Have a warning, Peter, I'm a believer in the [inaudible] at the moment because of the complexities, but maybe you think differently.

MR. GALBRAITH: We were just discussing as to whether it made sense for this to go a

bit more slowly, take more time. I actually would agree with that thought.

First, the problem is that we're rushing in without having a plan, and you see on the ground in very real terms the consequences of the bureaucratic feuding in Washington between the Pentagon and the State Department which meant that the people of Garner's team were not recruited until the week the war began; they were not in place; and Garner didn't arrive in Baghdad until 13 days after the Marines; his operation is just barely getting started. A lot of these issues, in my judgment, have not been thought out. Therefore in a sort of macro sense I would sort out the constitutional issues, the political issues, before proceeding with a lot of other questions. I'll illustrate it with something quite on point from the Marsh Arabs, but nonetheless an incredibly important issue.

There is a plan to create a new Iraqi army basically around Ahmed Chalabi's Free Iraqi Forces. I have great respect for Ahmed Chalabi and I think he will have an important leadership role, but there are a lot of other Iraqis who may not feel that that would be the best nucleus for a future Iraqi army. The role then of course is what would be the role of the Kurdish peshmerga in that arrangement? Well, for them, the Iraqi army has equaled only genocide and repression. They regret the oil wealth of Iraq because it's been used against them.

So unless you can sort out the arrangement between the Kurdish forces which they'd like to keep as a self-defense force and the Iraqi army, maybe it's not a great idea to start rebuilding the army. First you need to decide on the mission. And that I think would go across, those kinds of issues, across the board.

You need to decide what the goals of your educational system are before you completely revamp it. You need to decide issues of just what we've been discussing here of water and agriculture. The Oil for Food program, incidentally there's not a food crisis in Iraq, maybe in some of the border areas, but lots of people, the food rations were nine kilos a day. It did have a depressive effect on agriculture in Kurdistan because goods were not bought locally.

So you need to sort all these things out before you rush ahead.

So if I understand your position of going slow, I would agree with that.

BARONESS NICHOLSON: That's meant to be in answer to your question.

But there's another comment I'd like to add to that which is that there's a great deal of worry and concern at the moment among a number of quarters of thought that there may be a sort of invisible invasion by the Islamic Republic of Iran of the south of Iraq, and that the southern Iraqis will tie themselves in with southern Iran and somehow make a new bloc which would split up Iraq. But my own history tells me about the continued war between the Mesopotamians and

the Ilamites which you would remember well, and I would suggest that from 2700 BC downwards, the hostility between those two very powerful and very productive civilizations remains today. The Ilamites, as you remember, had minerals as their great wealth, the Mesopotamians had then the great fertility that Saddam has wiped out, the agricultural and fishing fertility then. They were always trying to poach each other's territory. But history shows they never actually came together, they were always against each other and always trying to poach.

I don't see any forecast that I can give any word to that these two sides will for the first time in history come together and forge a common identity which will have the effect that some are afraid of.

So, critical realities.

QUESTION: I'm David Merash from ABC News Nightline.

Dr. Naff pointed out that the extent of restoration possible will be defined by the competing international and intranational claims to water. But also there will be internal claims from the populace of the Marsh Arabs, many of whom, particularly the refugees, have been living in or close proximity to the 21st Century and may not aspire to Wilfred Thesiger's ideal of the Sumerian lifestyle.

So how compatible will a grid of roadways or communication, electronic power lines, water pipelines, oil pipelines, all of which at least part of the internal constituency of the marshes will want, how compatible is that development to sustaining the wetlands and the marsh areas? In other words can the marshes not only be partially restored but be brought into the 21st Century rather than being kept as a kind of, dare I say it, Disneyfied theme park of Sumerian culture?

QUESTION: Fariborz Fatemi with the Oxfordshire Group. I'd like to address my question to Peter Galbraith, he's an expert on this area.

First, I'd like to thank Roberta and the panel for bringing this very egregious problem to the attention of everyone. But moreover, speaking with Iraqis there's a greater skepticism as to why all of a sudden we're interested in the marshes since, as Peter pointed out, we stood by in 1991 or in the '90s, and let Saddam destroy it and did nothing about that. Didn't say a word at the UN or any place else. And now they're saying that maybe we are interested in restoring the marshes or part of it because what we're really interested in is the oil. And one or two people sort of touched on the oil. But it seems to me the oil becomes sort of the revolving wheel about this. I'd like Peter to talk about that a little bit in terms of the politics of what's going on here.

MR. NAFF: Over the course of the 20th Century there was a gradual movement of the younger members of the Marsh Arabs out of the marshes, into the cities, and into a more sophisticated kind of life.

The way of life of the Marsh Arabs may be very traditional but it doesn't mean that they don't have intelligence and are unaware of the world around them. The world around them has imposed itself on the marshes - a significant reason for their destruction. The Marsh Arabs have adapted and even taken some advantage of that encroachment of modernism. I think that same process will continue as changes occur.

Probably the basic rule of thumb here is the old one that change isn't real unless it's slow. That is to say if changes are imposed on them immediately and very rapidly there will be resistance because change is frightening in and of itself, and it will also disorient the people and their culture. It isn't easy to make quick adaptations.

But I believe that if change is rational and if it takes into account the traditions and the nature of the situation, the Marsh Arabs are perfectly capable of making the necessary adaptations.

QUESTION: My question was actually more to the physical environment itself. How adaptable are the wetlands to a network of roads, a power grid of pipelines? Or is there something inherently destructive about that particular aspect of it?

MR. NAFF: There the answer is a little more complicated. It depends on where the roads are cut. It depends on how the roads are being used.

But the quick answer and the simplistic answer is no, they're not that easily adaptable. The marshes would be very vulnerable to such changes. The introduction of roads and oil riggings and pipelines if not carried out with great care for the fragility of the marshes could be destructive. That's the quick, simple answer.

BARONESS NICHOLSON: Mohammed, did you want to answer an earlier question?

MR. JAMA: Yes, thank you.

I'm not a water engineer but I'm a physician. And why are we discussing the Marsh Arabs today? Because there are opportunities to address their problems and the suffering that they have gone through. But within the context of a new Iraq where there will be competing interests and priorities that I think my colleague has alluded to earlier. But while reconstruction in the long term may take time, health services, education, cannot wait. In the mean time you might lose a lot of lives that could have been saved. If you address the immediate needs of today and then

look in the future for the reconstruction or restoration of the marshlands in the long term the vacuum of authority and governance in Iraq, the looting of the health facilities, the cessation of immunization services over the last six weeks or for the last two months, will definitely and surely claim a lot of innocent lives.

Measles outbreak in the north which still has some functioning immunization services. In the south, none. No electricity, all facilities have been destroyed. Water as Emma was talking about. Today I received a call from Basra. Cholera outbreak. It will claim innocent lives. We cannot [inaudible] everywhere in every corner.

How are we going to address both the immediate needs of today and the long term development of addressing confidence, political and ecological and other issues? I think we should not lose sight of addressing the needs of today or feeding, opening the schools before you reform and develop curriculums because the curriculums that exist today are good enough maybe to train Iraqi scientists. This needs an immediate attention from the international community and from the Iraqis themselves, and I think we need not to lose sight of that.

BARONESS NICHOLSON: Thank you.

Another answer to your question, Dr. Jama has identified the needs of the marsh people as an absolute. I would add to that our responsibility for the destruction. Because we knew all about this all along. Every single step of the way we had the knowledge. We watched it happen. We had the film, the satellite, the knowledge on the ground floor, we even knew about the plan of Saddam to wipe these people out ranging right back to 1987. We watched it happen. Indeed, there were many political meetings. The possibility of intervention was discussed. It was decided to leave it alone.

So I would suggest that the need is there and that the responsibility for the destruction of what I think Thomas Naff would describe as probably the finest and largest ecosystem, marshland in the whole of Asia, the destruction of half a million people in one way or another. It's our responsibility. We had the power, the authority, the knowledge, the ability to act and we chose not to.

The outcome is, as you have heard it described by many people in the audience and on the panel today. I don't think we can allow ourselves just to think in international terms of these great ideas about reconstruction. I think we bear a very heavy burden indeed for what has gone on.

We knew. Every single piece of knowledge that was available, was ours in time, including photography by the overflight pilots who filmed the burning and were most distressed.

I think that what has happened as a result of our inaction has been genocide and I personally think there's a much larger step that should be taken even than the restoration and the return of the marsh people and all the rest of it. There should be a trial of Saddam Hussein if he's still alive, if he's still around, and of anybody else that we can take right up and down his system for genocide against the marsh people. We'll never be able to get him on Huwaizah, it's too far away. We didn't do it at the time. It's very difficult to do now in international goals. The International Criminal Court exists for genocide and crimes like this.

The drainage of the marshes is still going on and it's the final weapon of destruction and genocide. There was a dam that I saw last week put in, in January of this year. It's within the mandate of the ICC. I would suggest we address that in the knowledge that we too bear the burden and responsibility, and we should try to get these people to trial. Then we can assess the compensation that you so rightly mentioned at the beginning.

If I can ask the rest of the panel to pick the points that are most important to them, one point each perhaps for a moment to wind up. Tom Naff?

MR. NAFF: One point. Yes.

I guess the point I'd like to make is that I may have misled you by my remarks concerning the question of agricultural development in Iraq. What I'm about to say applies not just to agriculture. My answer was too simplistic. I didn't mention the fact that we live in a global economy that determines the impact of one region's trading activities on other regions near and far, particularly agriculture. When agriculture is traded, it involves the export and import of
water embedded in the exchanged products - a phenomenon that's more involved than that description. The point is that the global economy makes such issues exponentially more complex. Iraqi planners and policy makers must think and act accordingly. Economic recovery will
not be an easy, quick fix. The agricultural offers special challenges not only as regards water but the farming population. Owing Saddam's policies and the poor condition of rural public health, there was a large migration of farmers to the cities, such that by the mid-nineties the number of farmers had dwindled to about two hundred thousand. But as conditions worsened in the cities owing to the effects of the Gulf War and subsequent sanctions, there was a reverse migration back to the farms. There are now about four hundred thousand farmers. Their futures will be tied to global market forces.

MR. GALBRAITH: Let me just respond to your question which was basically how do you respond to the idea that we're restoring the marshes for oil.

I think Emma and others have made the point that of course we're talking about it now

because it is possible. But to go back to 1991, it's important to understand the difference in perception. I think the Bush Administration made a historic mistake. It wasn't not sending American troops to Baghdad at the time, but it was the failure to support the uprising. They did so because they felt that if a Kurdish Shiite uprising would succeed it would break up Iraq. I think it was a wrong judgment, but it was a mistake and an honest mistake that can occur in this kind of process.

If you look at it from the perspective of a Shiite or a Marsh Arab, you can't imagine that the United States did this by a mistake, a policy error. You think it was intentionally targeted on you. And now the same problem arises with the oil.

I don't believe this war was fought for oil, but we've had a terrible public relations disaster in the sense that we made a point of protecting the oilfields and the Oil Ministry in Baghdad and failed to secure the museum, the library -- Incidentally, the museum is just the tip of the iceberg of the losses. This isn't just something that sort of circles around in Washington. Every Iraqi I talked to would raise exactly this point.

Again, I don't think there was anything intentional in not protecting the museum or the library or the universities, it was an oversight. An inexcusable one. A truly terrible mistake. But that isn't how it's seen from Baghdad.

As to what you do about it, well I think you have to acknowledge your responsibility and I think the Administration's made a bit of a mistake by dismissing this as a bit of democratic exuberance or untidiness. In fact we were the occupying power, there was no Iraqi authority, we had an obligation. Nor should we try to minimize the loss as a lot of stories are coming out. I don't think they're true. I think the losses were very severe. But we should forthrightly acknowledge our mistake. I think that will have some credibility with the Iraqis. Again, respect their constitutional process, help them sort out a future of this very complicated diverse country not in our image but as a voluntary union accepted by each of the constituent elements for whom there are some incentives to have a country. But if you talk that way then you also have to accept the consequences if some people don't want to be a part of that voluntary unit.

MR. TANNER: I would just like to build on the point raised by the gentleman, the first point, and that is the lack of Iraqi participation. I think you're absolutely right. And I believe passionately that Iraq, unlike other countries, post-conflict countries, whatever you want to call them, has both the resources, unlike say Bosnia or Kosovo, and the brain power, the human capital, unlike say Afghanistan, to rebuild a new society itself. And that Iraqis have to take the lead.

However, when you're speaking about the Marsh Arabs I believe that they are historically a marginalized group not only within Iraq society but even within the Shi'a society. And that

there is a role for outsiders who otherwise have less of a role than in other post-conflict situations, the NGOs, even the UN agencies. There is a role for these groups, these international groups to stand up or to help the Marsh Arabs stand up and voice their probably very diverse and disparate opinions.

Thanks very much.

MR. JAMA: I think nationbuilding is a very complex and challenging issue. My organization has been involved in a number of such situations, lately in East Timor, and also Afghanistan, and it will require the people themselves. While international support is very important, the nationals, the Iraqis are the ones who are going ultimately to fix the problem.

In the health sector, Iraq has a highly qualified workforce and I think once the vacuum of power is filled and proper direction and policies are developed, I am sure that they can address immediately but in a relatively short time and can have living standards and indicators that are comparable to middle income or higher middle income countries.

Thank you.

MR. CLARK: I just wish to make a commercial about the book. A new edition is being published this month, what you might call a post-war edition with some new material. It will also be a paperback edition. This volume is about $60 and the paperback edition with some new material will be about a third of the price.

On the back of the new edition we have an extract from a review by Charles Tripp, one of the leading historians of modern Iraq, who says that the treatment of the new authorities in Iraq of the marshlands will be a measure of the success of a new regime.

BARONESS NICHOLSON: Thank you very much.

Now if I could thank Mr. President for all of the hospitality that we've had from the Brookings Institution
this afternoon, and multiple apologies for a six-minute overrun which I am feeling guilty about and apologies, and a multiple apology to the gentleman, our first questioner, who's been struggling to get back in with a supplementary, and because he hit the nail so firmly on the head and so correctly first time I haven't let him in a second time.

Thank you very much indeed for all of the organization and I hope that we fulfilled your expectations of a topic that you so correctly said is a very very important one indeed. Thank you so very much.

####