manner, how greatly it could have helped in reducing and eliminating the tensions they claim they want to end? This issue must be addressed separately and apart from the fact that it is to the interest and benefit of Americans to have their oil companies get involved in the Iranian oil and gas industry. Can one really justify this type of 19th century vies and thoughts, that through boycotting a country, even if the imposer of the sanction is a superpower, by weakening the boycotting country politically and economically, the imposer of the sanction will yield benefits from it? Has the U.S. actually benefited from this in the last few years of the twentieth century?!

Another feature of the sanctions was that it allowed Iraq to attract risk free and financially guaranteed contracts for projects such as production sharing ones, whereas under normal circumstances it would not have signed such contracts. However, the experts in Iraq's affairs believe that such bonuses are not included the state's "Buy-back" contracts.

The third point regarding the sanctions is the unofficial lifting of "ILSA" with respect to Iran. There are some claims that the reason Total did not face sanction by the U.S. was because of the EU's full support of the French oil company, and also due to Total's very little assets in America. But that cannot be true since Shell's contract with Iran did not provoke the U.S. government to retaliate against this company although it's interests in the U.S. are much greater than Total's.

Indeed, it is one of national Iranian Oil Company's major policy to attract effective foreign oil companies to invest in its upstream and downstream projects.

The Islamic Republic of Iran intends to attract up to US$ 3 billion worth of investments only in the year 2000 for it's oil industry.

The Plans under study for gas injection projects during the 2000-2004, require an investment of nearly US$ 3 billion, aroun US$ 2.5 billion of which sum have to be supplied through "Buy-back" Type Contracts.

Another gas project under study shows that to develop Iran's gas reserves during the 1999-2013, an investment of US$ 18 billion is required, and a considerable portion of which has to be supplied through international companies participation in the projects.

Now that the Buy-Back contracts for implementing phases 4 & 5 of South Pars field are finalized, the Iranian Oil Ministry's officials are considering to implement phases 6,7 and 8 of the same field.

Finally, one should note that "A wise and thoughtful management and leadership is always preferred to a baseless hegemonical leadership." ■

Table 1: Gas injection projects and investment requirements during 2000-2004

Group	Gas injection Projects	Secondary Oil Recovery Million Barrels	Incremental Oil Production Thousand Barrels Per Day	Investment Million Dollars
1	Under construction	8638	604	43
	Buy-Back	6703	320	1692
	Total Group 1	15341	924	1735
2	Investment by NIOC	621	48	318
	Buy-Back	1678	100	5882
	Total Group 2	2299	148	906
3	Investment by NIOC	374	30	210
	Buy-Back	44	4	50
	Total Group 3	418	34	260
4	Investment by NIOC	126	10	50
	Buy-Back	43	4	24
	Total Group 4	170	14	74
	Total	18228	1120	2975

The UN Sanctions against Libya

Following various attacks against the ones who sabotaged a Pan Am Jetliner in 1988- known as Lockerby Incident- and also the WTA flight in the skies of Africa, the UN security council on March 31,1992 passed resolution 478 which required all member countries to observe sanction against Libya with respect to military, and diplomatic relations as well as bilateral flights. This resolution was passed as a tougher measure further to the UN resolution "731" passed on January 21,1992 in which Libya had been condemned for evading the requests put forth by America, England and France for administering a thorough investigation of the explosions in the two airline- Pan Am and WTA- planes.

Further UN sanctions- oil sanctions- through the resolution 883 on November 11,1993 were imposed on Libya any type of facilities and equipment useful in the export of oil and gas, and or, in the area of refining. Libya has announced that these sanctions until 1998 had cost the country around 24 billion dollars, most of which affected its oil industry.

The United Nations issued the resolution 1192 which deals with the conditions for lifting the UN sanctions against Libya.

However, the UN General Council had requested the UN Security Council to temporarily- for 90 days-lift the sanctions provided that Libya met the U.N. conditions for lifing the sanctions permanently.

Inspite of the fact that Libya turned over the two Libyan suspects to the Hague Court, the U.S. announced that it would veto any call for lifting the sanctions unless, Libya actually showed its willingness to fully observe the resolution 1192.

The Effects of Sanctions

During the first sanction imposed by the U.S. on Libya, American companies withdrew from that country's oil upstream industry. Under the second sanction in 1986, the 5 remaining American companies were forced to stop their activities and pull out of Libya, and that led to quick attraction of Canadian and European, particularly English companies to Libyan oil industry. Up to that point, Libya faced no severe financial losses.

Thereafter and following the sanction imposed by the U.N. the country faced serious financial losses mainly in its oil industry. In addition to the 24 billion dollars loss-according to the official statistics- inflicted upon Libya by the sanctions until 1988, that country's income dropped by 5 billion dollars. The Libyan oil industry endured the largest sum of financial losses, and the refining section within the oil industry faced the highest loss.

The trend of development and progress in the areas of exploration and production were substantially damaged. Moreover, the gas development to meet increase in domestic demand and the demand for export has tremendously slowed down.

Plans to manage crisis caused by the sanctions

In the 1980s, Libya increased the number of its oil contracts with European companies in order to resist the U.S. oil sanctions. Thus, important exploration and production sharing Agreements (EPSAs) were signed with both European and Canadian companies. Through that, Libya was able to partly resolve the problems stemming out of the sanctions. Also to defy the ILSA, Libya attempted to attract foreign investment through organizing various oil and gas consortiums. Although this was the remedy for the foreign companies to avoid the U.S. punishing measures the trend of E& P Proceeded at a slow pace, as a result of the sanctions. According to the Libyan oil company's statistics, the rate of oil activities of the country has faced a yearly downward trend of 7 to 8 percent. It is worthwhile to point out that only European oil companies; the most prominent ones of which: Veba, Wintershall, Agip, Oel, OMW and Repsol Manage 40% of Libyan oil production. Yet as a major oil policy, Libya continues to attract foreign capital through EPSAs and the EPS3 contracts in 1999, are clear examples of such policy.

Sanctions: Past and Future

Undoubtedly, the imposition of sanctions in 1990s has had great impact on both, the sanctioned countries and the world energy market as well. However, in such a short time, only the salient points int his regard may be reviewed.

The first thing to note is that the sanctions had substantial impact on the economy of Iraq and Libya because they were imposed by the UN.

Iran's oil and gas industry faced direct and indirect sanctions by only America, sustained some losses but, the extent of losses were limited in comparision with those of Libya and Iraq in particular. Moreover, the sanctions against Iran, cost America a great deal directly and indirectly. It may be summed up that the extent of losses and costs to the U.S. was more than the relevant gains. Indeed, has it ever occurred to Americans, that if the contract between the American oil company, Conoco and Iran had gone through in a natural and normal

from its production. It is interesting to note that the negotiation for these development projects which requires 18-19 billion dollars has been in the context of production-sharing contracts; a great number of which has reached the final stage. So the development programs will begin immediately, once the sanctions are lifted. Iraq is also determined to implement its gas development plans right after the sanctions are lifted. It is worthwhile to point out that, Russian and Chinese oil companies are having a strong presence in Iraq's oil and gas development programs, and the U.S. is the only country with absent oil and gas companies.

U.S. Sanctions against Libya

The first sanction against Libya was imposed on March, 10, 1982 which seemed to be an economic one. However, in 1986, the embargo became more serious. Although they were not oil sanctions, they did fully affect the Libyan oil industry. The outcome of these sanctions was: increase in profits and greater presence of European and Canadian companies in Libyan hydrocarbon industry. In general, the American embargoes against Libya in 1986, involved the blocking of that country's assets in the U.S. and boycot of all financial and commercial activities.

The third sanction of the U.S. against Libya became known as the ILSA (Iran-Libya Sanctions Act), which was imposed in August 1996 against that country as well as Iran. If we were to select a name for various decades with respect to the international oil and gas industry, "The Decade of Oil and Gas Sanctions" would be the most appropriate one for the last decade of the twentieth century. On one side, there stands the U.S.A. as the imposer of the sanctions, and on the other side, there are three boycotted countries, namely I.R. Iran, Iraq and Libya. Of course, the U.N. has partly gotten involved in the embargoing of Libya and Iraq.

According to this Act, any country investing 40 million US dollars or more in Libya or Iran within a 12 month period, such that it improves either one of the two countries' oil industries, would face sanction. The ILSA covers 6 categories that are related to financial sanctions. These sanctions against Libya may only be removed provided that Libya fully observes the U.N. resolutions: 731, 748, 883 and 1192 on which we will shortly elaborate.

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Five Companies- 4 foreign and multinational and one Iranian companies- purchased the tender documents. However, only two of the companies' responses were technically and financially justifiable.

Of the two companies, initially, it was the Conoco, an American oil company that was selected as the winner of the tender, but the "ILSA" forced the company to forgo such a great opportunity and let its rival fill the position. As a result, the Total Group comprised of French Total, Russian Gazprom and Malaysian Petronas, not only won this tender but also won the project contract with respect to phases 2 and 3 of the offshore South Pars gas field. It is important to note that according to the Chairman of Total, the EU was in advance informed and approved the contract which appeared as the main headlines of international economic news. The U.S. in turn came up with the D'Amato Act which stipulated harsher punishment for the companies investing in Iran's hydrocarbon Industry. But these threats were of no avail since European governments and companies reacted quite decisively. The Clinton administration in an attempt to hide the U.S. weakness and to prevent any further deterioration of its position in the international scene, announced that there was no deadline in the Act regarding the premeditated punishment.

Interestingly, Shell Oil Company was the next one that declared its readiness to implement the gas pipeline project linking Turkmenistan to Turkey via Iran. Subsequently, the U.S. government announced that the pipeline project had nothing to do with investing in Iran, and thus it did not defy the Act.

Further similar Buy Back contracts- which Iran signed with companies such as, Bow Valley from Canada for the development of Balal Oil Field, and Elf/Agip for the production development of oil from Dorood Oil field exposed the ineffectiveness of the U.S. position in this regard. In fact, Shell's broader involvement by signing a contract to invest in Soroush and Nowrooz oil fields, in the last days of the 20th Century, served the final and fatal blow to the effectiveness of American sanctions against oil companies. This contract is also a "Buy-Back" one, in which Shell is committed to bring the two fields into production within 2 years and then, raise the volume of production from 60000 b/d at the start, to its final capacity of 190000 b/d in 21 months. The capital investment in this contract amounts to 799 million U.S. dollars which has to be completed in a period of 7 years from the time of initial production.

Unofficial Sanctions

The unofficial or indirect American sanctions against Iran's oil and gas industry involves the U.S. diplomatic actions to block fruitful relations between Iran and the Caspian Sea littoral states with respect to their cooperation in transferring the oil and gas produced from that region to the world markets.

Of course, the U.S. did not succeed noticeably in its great efforts, in this respect, during the 2nd half of the 1990s, The Baku- Ceyhan pipeline agreement signed in Nov. 1999 in Istanbul, Turkey at best can be seen as a weak success of American unofficial sanctions against Iran's oil and gas industry. Indeed, the future will reveal who the real loser will be: Iran or America? The review of the world's popular news media and publications' reactions in this regard justifies this claim that such pipeline project is not in any way economically in line with international standards. Hence, it is merely an outcome of some political considerations or rather baseless political considerations that caused the dismissal of the best route for transferring the Caspian region's oil and gas to international markets.

International Sanctions Against Iraq's Oil & Gas Industry

Following the full scale Iraq's military invasion of Kuwait in August 1990, the UN security council imposed broad sanctions on Iraq that mainly covered its oil and gas industry. Although, this country was under total sanction by the UN, its oil export activities never fully ceased. It exported, 39000 b/d in 1991, 61000 in 1992 and 220000 b/d in 1996. The main portion of its oil export was to Jordan which the UN had exceptionally allowed.

The resolution 986 of the UN Security Council was the first breakthrough in partial lifting of the economic sanction against Iraq. According to this resolution, oil was allowed to be traded for food and medicine. Thereafter, as per the Security Council's resolutions, the volume of Iraq's oil export saw an upward trend. Needless to say that the country's oil export is still controlled by the UN.

The UN sanctions also prohibits investment in Iraq's oil and gas industry. However, in June 1998, the Security Council passed a resolution allowing Iraq to import some of the industry's needed spare parts worth 600 million dollars in a 12 month period. But, according to some news agencies, the U.S. had prevented Iraq from importing the spare parts.

Since 1998, Iraq has seriously begun extensive negotiation with foreign companies to sign contracts for developing its oil and gas industry, even though, the UN sanctions against this state continue without a clear deadline. Iraq's goal through these negotiations in 1998 and 1999, has been to pave the grounds for export of 2845 thousand b/d

Iran's Oil & Gas Industry and the Sanctions

B. Poursina, Delivered in PSC Roundtable, Jan. 2000, Malaysia

The aim of this writing is, through a brief examination of the nature of the implemented sanctions, to draw the attention of authorities and experts in the world oil and gas industry to the impact of the sanctions on the industry and the embargoed countries.

Sanctions imposed on Iran's Oil & Gas Industry are quite different from those imposed on Libya and Iraq; Iran was never boycotted by the UN. Further, the U.S. sacntions against Iran may be categorized as official and unofficial sanctions.

The U.S. government, through its official sanction under Iran-Libya sanction Act (ILSA), threatened all American and non-American Companies with sanction if they invested over 20 million dollars in the oil industry of the Islamic Republic of Iran. This threat came amid the international tender offered by National Iranian Oil Company (NIOC) for the development projects: Siri Island offshore Oil blocks: