

The Applied Research Institute-Jerusalem

ARIJ



Annual Report

2004

1. Introduction

Following four years of austerity and uncertainty, 2004 witnessed a process of restoring stabilization at ARIJ. The Israeli occupation army withdrew from the heart of area A in Bethlehem but throughout the year, several incursions took place. Work on the segregation wall continued throughout the year especially in the vicinity of ARIJ where it is now less than 100 meters away. On several occasions, the Israeli army placed a flying checkpoint right in front of ARIJ premises to restrict entrance of Palestinians to Jerusalem. However, these practices had little impact on the activities of ARIJ.



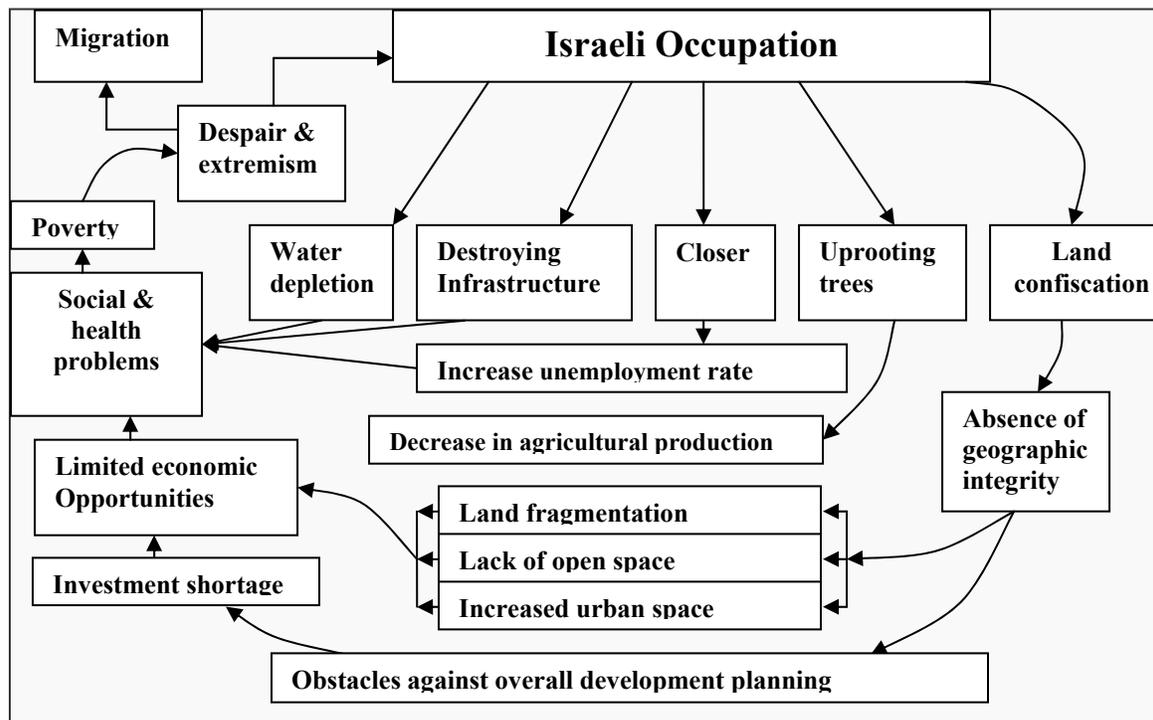
In 2004, the Palestinian National Authority adopted a developmental plan aimed at rehabilitation and stabilization. During the past four year, the Palestinian economy has nearly collapsed. The GDP had declined by about one third. Before the Intifada, 160,000 Palestinians found employment in Israel but the number declined in 2004 to less than 25,000. Unemployment rates are in the range of 60-70%. There is no food shortage in the OPT, but people are suffering from malnutrition as a result of the difficulties in obtaining balanced food. A large number of the Palestinians in the West Bank and Gaza are dependent on humanitarian food aid. It is clear that donors assistance can only prevent the deterioration of humanitarian conditions but cannot solve the inherent problems in the OPT associated with the Israeli occupation and its practices. Palestinian decision-makers face the major dilemma of how to initiate sustainable development strategies given the uncertainties related to the eventual outcomes of the final status negotiations.

Under such conditions, ARIJ adapted its activities in 2004 to combine both regular research projects as well as provision of services and development addressing both short term and medium term needs of the community. To this effect, ARIJ embarked on launching a new set of projects that aim to create the linkage between scientific research and the well being of the society such as promoting urban agriculture, dry land farming and agribusiness to alleviate poverty, provide job opportunities and promote food security in marginalized areas.

2. ARIJ activities in 2004

2.1 Developing a new medium term strategy

ARIJ is aware of the organic relationship between development, environment and the political conflict as shown in this diagram.



Environmental problems cannot be isolated from economic, political and social issues. Any attempt to address the environment must place the issue into a broader context which apprehends its complexity. Sustainable development and environmental protection are key factors that will determine the sustainability of any peace agreement between Israelis and Palestinians. Ignoring these issues will have long term repercussions on the carrying capacity of the fragile environmental resources.

ARIJ recognizes that proper policies and management is the only means to achieve a proper balance between societal development and environmental preservation. Thus, ARIJ will continue its efforts to develop its research capabilities and programs to protect the fragile Palestinian environment that is subjected to tremendous stress due to the political conflict.

This year, ARIJ put together its 5-year Research and Development (R&D) strategy (2005-2010). The current R&D strategy focuses on 2 thematic areas; namely sustainable resource management and sustainable agriculture. The following is a description of the aforementioned thematic areas:

I. Sustainable Resource Management

The Palestinian territories have been affected by the political and demographic changes in the region. The land cover is mostly open with little vegetation; this is a fragile ecosystem vulnerable to anthropogenic impacts (e.g. grazing, tourism and expansion of built-up areas). Several areas have become degraded through deprivation of freshwater, through expansion of human settlements, through open discharge of pollutants, and through inappropriate land use. Water shortage and land degradation are a problem all over the Palestinian territories and these are likely to exacerbate with deteriorating political situation, population growth and changes in consumption trends. Large scale modifications of the landscape have been produced in the Palestinian territories including the construction of bypass roads, erection of walls and fences, land fragmentation, habitat loss, uprooting of trees and deforestation. Needless to say, any further depletion of natural resources would curtail the potential of achieving sustainable development and of establishing a viable future Palestinian state.

The objective of this research programme is to assess alternative options, policies and strategies for their potential to conserve the natural resource base and to promote sustainable development and from that to develop recommendations for strategic decision making. In doing so, ARIJ recognizes the complexity of interactions between the natural resources and the society and the role the society plays in managing natural resources and therefore plans to engage the public in the decision making process. To achieve this, several tools were identified:

- Promoting the localization of Agenda 21 at a locality level.
- Monitoring changes in land use and land cover, desertification processes and land degradation to identify priority conservation areas where mitigation measures are most needed.
- Environmental modeling (e.g. Land and water optimization tools, development of future scenarios)
- Testing and introducing environmental technologies aimed at reducing the hazards of solid waste, wastewater and air pollution.
- Promoting environmental education and public awareness.

II. Sustainable Agriculture

The agriculture sector and rural life have always enjoyed a special place in the Palestinian society. Prior to the Intifada, the sector contributed less than 8% to the GNP and employed only 13.4% of the labour force, with many workers having been forced to seek employment in other sectors or in Israel. The sector is also considered as a refuge for thousands of workers in times of closure when they are forced to search for alternative job opportunities. In this case, the sector works to cushion the negative impact of the

external shocks, especially on unemployment. All estimates now indicate that agriculture contributes between 12 and 20 % to the GNP and employs one third of the work force.

Taking into account the land and water constraints affecting the Palestinian agricultural sector, ARIJ will focus its work on promoting sustainable agriculture that will increase the profitability of agricultural production and food security under the current conditions through:

- Promoting urban agriculture.
- Improving the mixed farming systems especially small ruminant management practices (housing, breeding, feeding).
- Promoting crop diversification.
- Increasing irrigation efficiency.
- Improving crop selection.
- Optimization of the available land and water resources.
- Sustaining economic activities in rural areas when other sectors have collapsed.
- Contributing to household food security by producing key traditional products such as dairy (milk, cheese) ones, vegetables and olive oil.

This strategy was developed in a consultative manner with a number of local institutions, donors, stakeholders and beneficiaries. In 2005, ARIJ will be working on restructuring its organization in light of the new strategy.

2.2 Institutional Development

During the past few years, ARIJ has been working on the development of the institution's capacity as a Palestinian research institute specialized in agricultural, environmental and water research. So far, ARIJ has been using the following list of indicators for assessment of its performance:

- Number and quality of its publications.
- Number of research project carried out.
- Number of farmers and other stakeholders benefiting from ARIJ activities.
- Demand for ARIJ publications and quality of these publications.
- Number of visits to ARIJ website.
- Level of technology ARIJ uses in its work.
- Number of workshops ARIJ participated in and the level of participation in these workshops.
- Number of presentations made.
- Level and degree of cooperation with national, regional and international institutions.

In 2004, an initial SWOT analysis was performed which highlighted the following:

Strengths

- ARIJ has a good reputation and excellent relations with local NGO's, Palestinian National Authority ministries and institutions, and foreign donors.

- ARIJ employs a well-experienced and self-motivated team that has a teamwork spirit.
- ARIJ uses the latest information technology tools that enable it to get information quickly and easily.
- ARIJ has a huge informative database that is generated from internal and external sources.
- Considerable participation of beneficiaries in ARIJ's projects and activities.
- Uniqueness of reports produced and projects undertaken by ARIJ.
- Increasing demand on ARIJ reports.

Weaknesses

- No sustainable funding exists to enable ARIJ to plan its operations.
- High employees' turnovers as staff members are leaving ARIJ after getting experience.

Opportunities

- As the nature of ARIJ operations is distinct in Palestine, ARIJ has the opportunity of becoming the leader in its field of expertise.
- ARIJ has the opportunity of becoming a primary provider of information for local and international institutes regarding environmental agricultural, natural resources and geographical information in Palestine.

Threats

- No sustainable funding may adversely affect ARIJ ability to accomplish its objectives.
- The Israeli restrictions may disable ARIJ staff from accessing all desired locations.
- Due to the political implication of its operations, ARIJ might be targeted, directly or indirectly, by Israelis.

To be able to effectively implement its research and development strategy, ARIJ has adopted the following administrative and financial strategies:

- Diversification of funding sources and moving from bilateral to multilateral donor assistance.
- Development of a core fund program.
- Creation of endowment budget to secure ARIJ sustainability.
- Executing local and international consultancies.
- Increasing the revenues from the sales of its publications and services.
- Conducting external evaluation for performance and technical and administrative procedures.
- Developing its current internal evaluation system.
- Updating bylaws, objectives and strategies.
- Developing human and infrastructure resources.
- Enhancing networking performance through participating in local and international professional environmental and agricultural networks.

Since 2002, ARIJ has been implementing a consolidated budget for all its activities where each project has its separate financial administration that is integrated in the overall ARIJ program. To facilitate this process, the computer and information systems unit developed an office automation system which allows for intranet administration and financial management. All of ARIJ's forms such as office leave, sick leaves, vacation, cars usage, requisition forms etc are now handled through the intranet. A customized time sheet for each employee has been built and linked with every ARIJ project. For each project, benchmark indicators and time lines have been identified and fed into the system. In addition, all ARIJ acquisitions in the resource centre have been integrated into an intranet accessible and researchable database.

To improve ARIJ's internal monitoring and evaluation system, the board of trustees met and institutionalized an internal evaluation committee. The objective of this committee is to apply internal evaluation system at ARIJ to improve its administrative system and work environment at the Institute. The committee started its work by holding meetings and conducting interviews with beneficiaries and stakeholders to assess the impact of ARIJ work on the community and identify strength and weaknesses of ARIJ program. Questionnaires were designed to get the input of ARIJ staff. By the end of the year, the committee submitted its report to the Administrative Committee to study it and follow its recommendations.

In addition, ARIJ approached Ernst & Young to conduct an overall external evaluation of the current organizational capacity of ARIJ that will cover the Organizational Structure, Governance body, Legal Framework, SWOT, environmental factors, Stakeholder influence, Goals objective strategies, Critical success factors, Performance indicators, Risk Management, Resources, Deliverables and their impact on users, Internal control system, Financial management, Reporting, Staff performance and motivation. In 2005, ARIJ will be working on implementing the recommendation made by the internal and external evaluation.

2.3 Research Activities in 2004

ARIJ research activities in 2004 included the implementation of the following research projects.

2.3.1 Sustainable Resource Management Program

2.3.1.1 Urbanization and its impacts on natural resources (phase two):

Through funding from the International Development Research Center in Canada, this project aimed at assessing the effects of urbanization (i.e. Palestinian and Israeli) on Palestinian communities and natural resources. Through analysis of satellite images (time series LANDSAT TM for the years 1989, 1990, 1996, 1997 and 2000) and fieldwork, the project identified the patterns of urbanization in the West Bank and changes of land use as well as estimating the social and economic effects of these changes. The overall

analysis was carried out on a number of selected 73 targeted cities, towns, villages and refugee camps in the West Bank.

In order to give an overview of the urban dynamics, the recent master plans and Village boundary delineation which was used during the British Mandate was used for the spatial analysis. Using GIS and remote sensing, the area and direction of urbanization trends were investigated in the West Bank Governorates. The direction of the urbanization trend is determined by observing the spatial formation of the urban area to identify locations that experienced development in land use. In this context, distinction between the Palestinian and Israeli land use developments were emphasized to assess their impact on the lost agricultural land in the West Bank, see map 1.

On 8. 8, 2004, the project final workshop was held in Ramallah under the auspices of the Palestinian Minister of Local Government and was attended by a large audience coming from PNA Ministries, municipalities, village councils, NGOs, universities and private planners. The project attracted considerable interest among the participants who provided valuable inputs which will be incorporated in the final project output in the form of a book that is expected to be published by April 2005.

2.3.1.2. Trans-boundary Air Quality Effects From Urbanization

The overall aim of the project, which is funded by MERC is the measurement of both meteorological and air quality data and the application of mesoscale metrological model and air quality model to gain an increased understanding of the air quality problems associated with current levels of regional urbanization. An air quality and Climatological station was installed at ARIJ premises in late 2003. This monitoring station includes four analyzers that measure the concentrations of SO₂, CO, Ozone, NO/NO₂/NO_x in ambient air in addition to the metrological station. A special lab was established at ARIJ to host the station. Observational data was continuously recorded in 2004. The analysis of the air quality data revealed the levels and sources of pollution. On the other hand, the Water and Environment Research unit has completed an emission inventory of all Green House and other pollutant Gases for the West Bank. Further information is downloadable from. <http://www.arij.org/units/posters/air-quality/air-quality%202004.htm>

2.3.1.3 Assessing waste management policy in Palestine

The proposed program aimed at analyzing all the national policies relevant to waste management issues by synthesizing the available data and analyzing the complex interactions between waste generation and management on the one hand and their relevant impacts on natural resources and human activities on the other hand. ARIJ utilized the Comprehensive Cost Benefit Analysis Method in order to assess the projected impacts of introducing policies and technological solutions to the fields of solid waste and wastewater management. This quantitative analytical framework was integrated into a logical framework that takes into account the social and political constraints. The results of the analysis provided information that is useful for decision makers to make practical decisions in the fields of solid waste and wastewater management. The

generated knowledge will be integrated into strategic and “*more sustainable than today*” waste management policies and plans. *Results of the project were disseminated via the World Wide Web and can be downloaded from:*

http://www.arij.org/units/posters/waste_management/index.htm

Educational material ensuing from the project was also disseminated via mass media in Al-Ayyam Newspaper in the November 2004 and January 2005 issues.

2.3.1.4 The Future of Dead Sea Basin: Options for More Sustainable Water Management

The water level of the Dead Sea has declined over 21 m from 1930 to 1997, and alone 12 m in the last 20 years. In less than a century the water level has fallen by approximately 25 m. In the past few years, the water level fell at a rate of 80-100 cm per year, with the average rate of fall accelerating in recent years. As a result, the Dead Sea surface area has shrunk by about 30% in the last 20 years.



Observed Drop in the water level of the Dead Sea between 1976 and 2003

It is not only the Dead Sea that is living up to its name, but the environment of the whole Dead Sea Basin is degrading. Many scientists say that as water drains away from the Dead Sea, the porous rocks beneath the region are drying out. It means the rocks are no longer able to support the weight of those above them and subside under the pressure. As a result, sinkholes and land subsidence have opened up along the shoreline, caused by lowered water tables and groundwater over-exploitation. Furthermore, the decline of the Dead Sea also affects the freshwater springs on its shores (e.g. Ain Fashkha, Ain Turiba) that support a unique biodiversity. The overall objective of the project is to establish the scientific basis for a “*more sustainable than today*” water management and water-related land management in the Dead Sea basin, and from this, to develop practical recommendations that can be used for strategic decision making.

2.3.1.5 Monitoring Israeli Settlements (phase two).

This project is supported by the European commission and implemented in cooperation with the Land Research Centre of the Arab Study Society. The main objective of the project is to monitor the physical Israeli violations by collecting, analyzing, updating the database, disseminating and presenting reliable information on Israeli activities and the physical changes they induce on the Palestinian landscape and the subsequent impacts on the local Palestinian people. This is accomplished through conducting field work at affected areas, interviewing local officials and inhabitants to get first hand information and analyzing satellite images, aerial photos and maps. The outputs are case-studies, monthly, quarterly and annual reports and presentations to interested groups about the geo-political status in the West Bank and Gaza including: the Israeli settlements, outposts, bypass roads, the Segregation Wall, land razing, land expropriation, trees uprooting, movement barriers and house demolitions. The research in 2004 revealed the following results:

- In 2004, the number of settlements in the West bank reached 211 settlements hosting nearly 450,000 Israeli settler, of which 210,000 settler live in 27 settlements in East Jerusalem and 8000 settler living in 21 settlements in the Gaza Strip. The number of new housing units in the West Bank settlements were 18650, 50.1% of which were concentrated in Jerusalem Governorate.
- Even with the over-debated dismantle of the outposts in different areas of the West Bank, the number of outposts kept growing to a record of 175 in 2004. The Israeli government provided the outposts with military protection and infrastructure services, in addition to financial support. Moreover, as years passed by; many existing outposts has grown into settlements
- There are 734 km of Israeli bypass roads inside the West Bank. The construction of which required the confiscation and destruction of approximately 87 km² of Palestinian land, most of which is originally agricultural. The network of barriers, including military checkpoints, allows Israel to control and monitor Palestinian access to the bypass road network. Additionally, these roads contribute to the fragmentation and cantonization of the West Bank by carving up Palestinian areas into isolated ghettos and often depriving the Palestinians of the vital agricultural land. After the second Intifada the West Bank was cut into 64 cantons and Gaza into 3 cantons. The cumulative area of the 64 cantons constitutes about 40% of the West Bank.
- According to the fieldwork undertaken by ARIJ and LRC's researchers in 2004 it was found that Israel currently maintains at least 441 barriers, including 60 permanent military checkpoints, 25 temporary and flying checkpoints, 99 cement roadblocks, 200 earth mounds, 34 iron gates, 23 Segregation Wall gates, and additional walls, fences and trenches, spread on roads throughout the OPT. These barriers contribute to the system of Israeli settlements and by-pass roads and further facilitate the fragmentation of the Palestinian territories.

- In 2004 Israel went on with the construction of the Segregation Wall. Many Palestinian communities have seen the wall cut between them and their agricultural lands. Other communities have been totally isolated and cut-off from neighboring towns and villages and from the rest of the West Bank. The Wall snakes across the Palestinian territory grabbing open spaces and Israeli settlements while encircling Palestinian built-up areas and incarcerating Palestinians into ghettos. The wall continued in the northeastern region of the West Bank, from the village of Salim to the Jordan Valley; the central region, including a section from the illegal Elkana settlement to the illegal Ofer settlement; the western Bethlehem section from the illegal Har Gilo settlement to the illegal Carmel settlement; and especially, around Jerusalem in the so called “Jerusalem Envelope.” Additionally, by the end of 2004 the Israeli government started the construction of the Segregation Wall south of the West Bank in Hebron Governorate.
- During 2004, there were 54,094 dunums of lands confiscated, 83956 trees uprooted and 1585 houses demolished in the West Bank. While there were 3466.5 dunums of lands confiscated, 34508 trees uprooted and 1347 houses demolished in Gaza Strip.

2.3.1.6 Policy tools towards sustainable land use and urban environmental management at municipal level under a transitional political context. The case of Bethlehem district, Palestine.

The project addresses the need for an efficient land-use development and urban environmental management at the local level in Bethlehem district, under the debate of a transitional political context and recent demographic changes; propose policy choices and prospecting the necessary tools to their implementation in order to contribute at the achievement of optimal use of land and natural resources by fostering the role of the local population in the development process as a necessary step towards a sustainable urban development. The project also addresses the need for Palestinian planners and policy makers at the Palestinian National Authority (PNA) level as well as at the local municipal level, to start crafting possible policies for the management of land and the urban environment in Bethlehem district. The project deals with the interaction between population, urban development and the environment with special emphasis given to demographic factors, land use and the urban environment at the main municipalities in Bethlehem district. During 2004 the research team reviewed the formulated policies and legislations on the national level; prepared special questionnaire for the communities leaders on the local legislations and their relations with national legislations and policies, their implementations and needs for development; interviewed the leaders of municipalities of the target areas; prepared a questionnaire for the citizens to investigate the public opinion, knowledge and awareness with regard to certain issues such as: the urban environmental problems, laws and regulations and the flow of information etc; and entered the collected and obtained data in an electronic format in an appropriate program.

2.3.2 Sustainable Agricultural Program

2.3.2.1. Improving field crops in the West Bank (Phase Four) project & Improving Plant Production to Enhance Food Security of Farming Communities in Rural Areas of Bethlehem Governorate project.

The Biodiversity and Agricultural Research Unit continued its demonstrations with farmers to improve households' food security in the marginal rural areas of Bethlehem Governorate through grants from the Canadian Food Grains Bank (CFGB) and Mennonite Central Committee (MCC) and ACDI/VOCA. The purpose of these activities is to enhance the sustainability of the rain-fed farming system, improving water management and increasing the production of irrigated agriculture to improve household food security and assist in improving self-sufficiency of the strategic and cash crops in Bethlehem Governorate. In the 2004, 278 farmer families, (74 of them were women farmers families) were provided with seeds of field crops and forages part of them was provided with fertilizers, through which 842 dunums were cultivated. Fifteen villages benefited from this activity.

Furthermore, ARIJ continued its seed breeding program for the second year. This program aims to improve the quantity and quality of production for the local varieties of wheat, snake cucumber and local squash. Seeds of F3 generation produced and stored to replant in year 2005. On the other hand, twelve dunums of local snake cucumber and squash were planted using organic compost as a fertilizer to improve the production. Also, eight dunums were planted with the seedlings of Acacia and Atriplex rangeland bushes through which additional sixteen farmers were benefited from the distributed compost and rangeland seedlings.

2004 was a drought year and dryland cultivations were severely affected. Despite that, ARIJ's farmers succeeded in producing 3,096 tons of seeds, 114.4 tons of hay and 152.9 tons of green and semi-green forages of different planted types of field crops and forages, valued around 24,650 USD according to the local market prices.

Additionally, an experiment on supplementary irrigation for wheat varieties was conducted for the second year to measure its potential in reducing the vulnerability of rainfed farming. The cultivated wheat varieties under supplementary irrigated gave more seeds than dryland wheat by 3 to 4 folds.

Fifteen cisterns and home gardens were constructed and established in three villages in Bethlehem Governorate. The farmers used the harvested water to irrigate their crops. Around 15.3 tons of different vegetables crops, valued around 6,770 USD according to the local market prices.

On the other hand, ARIJ constructed 29 greenhouses for its partner farmers with a total area of 12.75 dunums in Artas, Wad Fuqin and Battir villages. The first round of greenhouses production was very optimistic and many of the farmers succeeded in

getting back their contribution in the greenhouses construction cost. The first round of greenhouses production valued around 21600 USD according to the local market prices.

A training program on green house management was conducted and about 20 farmers in addition to five agricultural extension agents from Bethlehem agricultural directorate participated in the training program.

ARIJ conducted a workshop to discuss the obtained results by the farmers on supplementary irrigation experiments for field crops cultivations. More than forty farmers and specialists attended the workshop.

2.3.2.2 Sustainable Access to Food and Economic Security in Jenin (SAFES Jenin)

2004 witnessed the launching of the project entitled "**Sustainable Access to Food and Economic Security in Jenin**" (SAFES Jenin) project. ARIJ is implementing this project jointly with Care International and Agriculture Engineer Cooperative (AEC) in ten villages of Jenin Governorate. During the second half of the year 2004 thirty seven top roof rainwater cisterns were constructed and 500 head of pregnant sheep were distributed to 250 needy households to improve their access to food.

The next table shows an aggregated summary of ARIJ's sustainable agricultural program for 2004.

Constructed cisterns*	52
Distributed pregnant sheep*	500
Constructed greenhouses	29
Established home gardens	52
Distributed seeds (tons)	10.8
Distributed seedlings (thousand)	25
Planted area (thousand dunums)	886
Job creation (Thousand working days)*	12.2
Vegetables & fruits production (tons)	46.9
Field crops seeds production (tons)	3.1
Hay production (tons)	114.4
green forages production (tons)	152.9
Farmers' income (thousand US\$)	52.9

*SAFES joint project achievements are included



Photo: ARIJ experimental site, conducted workshop and the production in the greenhouses.

2.4 Other activities of the research and support units at ARIJ

2.4.1. Biodiversity and Agricultural Research Unit (BARU)

During 2004, BARU continued to promote its research and developmental activities to promote sustainable agriculture in Palestine. ARIJ joined the **Agriculture Rural Development Initiative (ARDI) which is a ...**ARIJ became the focal point of this initiative in Palestine. Several meetings were held to institutionalize a Palestinian consortium for ARDI Palestine in cooperation with the local NGO's, Ministry of Agriculture, Research Centers, Universities and the private sector. In 2005, a memorandum of understanding will be developed between the members of ARDI Palestine as well as a plan of action.

The Spanish Development Cooperation as the co-chair of the Agricultural Sector Working commissioned ARIJ to build an **Agricultural Projects Information System (APIS)** that would allow donors and decision makers to identify the various projects that are being implemented in Palestine and their stages of implementation : BARU and CISU (Commuter and information systems unit) built the web based database and are currently working on filling the database and developing it to become an expert decision support system that will include mapping capabilities.

BARU continued its work on seed improvement program. This year the seeds of fourth generation of local varieties of wheat sank cucumber and squash were produced and will be retested for their selected characteristics. This year, BARU tested a new color – pheromone traps to combat the Mediterranean olive fruit fly. Optimistic results were obtained and ARIJ plans to expand this activity next year.

2.4.2 The Computer and Information Systems unit

Computer and Information Systems unit

In 2004, the Computer and Information Systems unit was in charge of the following activities:

- Completing the prototype of the Office Automation Programming
- Developing and programming APIS
- Development of the time sheet.and activity reports
- Fivims

- Installing a Video Conferencing unit at ARIJ
- Network Administration and Maintenance.
- Constructing a new POICA Database driven website.
- Writing an Information Technology Security proposal as a part of joint project with GIFTA.
- Conducting an IT workshop for university professors to push up IT research in Palestine.
- Partnership with The Bethlehem Alliance which is trying to introduce internet II in Palestine and made demonstration on using Video Conference.
- Developing the Palestine Agricultural information system (APIS)

2.4.3 Water And Environment Research Unit (WERU)

The Water and Environment Research Unit enjoys the services of a multidisciplinary team working on several thematic areas of research; these are:

The synthesis and visualization of environmental data through linking dynamic models with geographical information systems: In the last year several research activities were centered on the development of a system simulation tool that models the dynamics of water availability, abstraction and allocation as well as understanding the powers that influence the allocation of water to certain water user categories or to certain economic sectors.

Scenario Development: A scenarios is a story or a "scene". It describes a situation in common terms that represents what might happen in the future. Scenarios of alternative future for the Dead Sea are currently being developed and will provide contrasting images for several Sustainable Development Indicators and will show how these will change under different policies and technological options.

Technological Development for small scale wastewater treatment and reuse: The Applied Research Institute produced the blueprints and the engineering designs for the construction and the operation of a small scale wastewater treatment plant utilizing the activated sludge treatment method. Research and consultation is now undergoing to reduce the cost of production to prices below the overall cost of drilling a wastewater cesspit. The objective is to replace cesspits with the Small Scale Wastewater treatment plants in order to increase water availability and to reduce the health and environmental costs associated with the discharge of wastewater into cesspits or directly into open spaces.

Technology Transfer for Centralized and Small Scale Composting: Approximately 60-70% of the generated domestic solid waste in Palestine is organic. Open dumps in the West bank and Sanitary Landfills in Gaza Strip are reaching their maximum capacity. The lack of open is compounding the problem. A feasible solution is to introduce centralized and backyard composting to reduce the volume of solid waste and make the way for potential future recycling of other recyclables. The designed and technological

options of composting were analyzed and the aerated static pile composting was selected over other technological options and was proposed for several donor agencies.

2.4.4. GIS and Remote Sensing Unit

The GIS and RS unit continues to use the state of the art data and mapping technology in land use analysis and planning, environmental and water management and sustainable development in Palestine. As Palestine is going through a continuous phase of environmental and land use changes, the continued updating of ARIJ's existing databases is crucial and vital in order to keep up with the new developments. Over the past five years, ARIJ has diligently worked on promoting its technical and human resources capabilities in the field of GIS and RS keeping track with the latest technologies. ARIJ has built a well developed GIS and RS unit based on ARC/INFO 8.3, 9 and PAMAP 5.1 for the GIS mapping technology, besides acquiring the professional image processing software ERDAS Imagine 8.7 and PCI 9 to accurately analyze and interpret satellite images and aerial photos.

The Joint Research Centre (JRC) provided ARIJ with IKONOS images covering the West Bank acquired in December 2003 and January 2004 and conducted jointly fieldwork that aimed at assessing the accuracy of the land use / land cover GIS layer of the West Bank. It also aimed at collecting Ground Control Points using D-GPS for remotely sensed images georeferencing and orthorectification. The image dataset was orthorectified and reprojected to fit the UTM WGS84 zone 36 projection. Another set of LANDSAT images acquired in two different seasons in the year in the period between 1985-2004 was purchased, georeferenced and atmospherically corrected. Furthermore, the unit is currently analyzing SPOT 5 2.5m colour satellite image for the West Bank acquired on 17 August 2004. The analysis involves delineating the road network, updating the Israeli colonies and outposts, the segregation wall and land use / land cover of the area along with new expansion of Israeli colonies and land use / land cover changes. Moreover, a great effort is currently put to produce a village profile which intends to develop a complete set of integrated physical and social infrastructure and natural features that will be linked to a spatial platform using modern computer technologies for the Palestinian communities.

The GIS and RS unit worked intensively to produce A Geopolitical Atlas of Palestine (the West Bank and Gaza) in October 2004 that includes the latest geopolitical changes in the Palestinian Territories as well as producing posters showing the impact of the Segregation Wall and Israeli colonies on the Palestinian communities. Other papers were prepared and presented in different national and international workshops describing the power of GIS and Remote Sensing in analysis land use changes. The unit also produced a poster showing the path of segregation wall in the West Bank and distributed it to the different national and international organizations and to the public.

One of the main tasks of the GIS unit is providing maps and statistical data to the settlement watch group who work in monitoring the latest changes in the Israeli settlements. The project is a continuation of the first phase project, which is supported by

the European Commission. ARIJ is implementing this project in cooperation with the Land Research Centre of the Arab Study Society. Herein, the project's second phase aims at monitoring the unilateral Israeli colonizing activities using the latest technologies of remote sensing and GIS. The settlement staff group publish weekly case studies supported by bespoke maps and reports analyzing the impacts of Israeli policies and colonising activities on the Palestinian Territories.

2.5 Consultancies

In recognition of its capabilities, and in line with its medium strategy, ARIJ was able to execute a number of consultancies during 2004 that included:

Agricultural Projects Information Systems (APIS): ARIJ was contracted by Spanish Cooperation to develop an integrated agricultural projects database based on the Agricultural Sectoral Working Group meetings recommendations. ARIJ has developed the structure of the Agricultural Projects Information Systems (APIS) by using a Web programming language PHP supported by an MYSQL database search engine. APIS intends to compile all information available concerning agricultural and related projects, as well as relevant information about the different organizations involved in agricultural development activities in the Palestinian Territories. The funding, executing and implementing agencies are entering their institutional profiles, projects' profile and activities by type and locality into the system. This system will be used as a decision support system for MOA which will serve the donors as well as local NGO's to improve their activities with transparent approach. It also aims at providing updated information with the latest developments in Agricultural development among all its members. APIS will provide valuable information such as: identification of under-funded areas, level of funding and support to the different sub-sectors and geographical areas, current status of different sub-sectors and their need of specific coordination, etc.

Development of a Water Catchments Information System (WCIS) for Al Baha Village: This consultancy was commissioned by the Ministry of agriculture (MOA) to study the water resources and land use in the catchment area of 500 dunums. The following activities were carried out to fulfill the consultancy objective:

- development of the land use / land cover map for Al Baha site by purchasing and analyzing LANDSAT images for the site using several image processing techniques (e.g. supervised classification);
- assessment of water and land resources in the catchment area;
- analysis of agricultural pattern in the target area through analyzing the cropping patterns, crop rotation and crop types in the catchment area;
- development of a soil profile and soil map of the study area;
- collection of climatic data for the site; and
- delineating the water catchment boundary and modeling surface water runoff (storm flow).
- Continuation of farmers training on home gardens management for SAFES project in Jenin.

- The conduction of the baseline survey consultancy for SAFES project in Jenin.

Regional Agro-biodiversity conservation project: ARIJ is executing this consultancy for UNDP as part of its regional project to promote the conservation and preservation of important wild relatives and landraces agricultural species. This project is in its fourth year and would be finished by April 2005. The GIS and RS unit has produced the project fourth year interim report and currently is finalizing the project overall report that is going to be submitted to the Global Environmental Facility (GEF), ICARDA and UNDP.

Development of Food Insecurity and Vulnerability Mapping Information Systems (FIVIMS) for the Palestinian Areas.

ARIJ was contracted by FAO in its efforts to build FIVIMS in cooperation with PCBS and the Palestinian Ministry of Planning. ARIJ provided assistance in preparing preliminary a list of data requirements, identifying data gaps and relations between data items as well as delivering a proposed final database structure for FIVIMS. Furthermore, ARIJ staff conducted a GIS training for trainees of the project team and developed a proposed FIVIMS platform, an initial project website with ArcIMS HTML viewer and FIVIMS GIS project that were installed at PCBS.

Production of ‘A three to four minute video clip’

ARIJ produced a video clip under the project ‘Mediterranean Voices: oral history and cultural practices in Mediterranean cities’ in cooperation with ‘Centre for Cultural Heritage Preservation’ - Bethlehem. It shows the gradual shrinking of borders from the end of World War I and the dismantling of the Ottoman Empire to the present, with the Segregation Wall encircling Bethlehem. Through graphic animation supported by maps, old etchings, documents and pictures show how with time and new political configurations, the open spaces of the Eastern Mediterranean have shrunk to the present reality of the Palestinian Bantustans. The video clip addressed the issue of enclaves created by the Segregation Wall and the ways they limit people’s mobility and daily transactions and deprive them of some basic rights, such as education, health care, social interaction and family integrity. The clip showed graphically the gradual formation of borders and conveyed a sense of the resulting degradation of a certain quality of life associated with the different periods as new borders emerge. It was submitted to the ‘Centre for Cultural Heritage Preservation’ in November 2004.

Wastewater Treatment and reuse Options in the West Bank and Gaza

This consultancy was commissioned by the World Bank: The objective of this study was to assess the situation in the WBGs with regards to wastewater treatment and reuse, investigate feasible and preferred options for reuse projects, and identify pilots and strategic direction related to treatment and reuse. Various options for wastewater treatment and reuse options have been proposed and investigated in several previous studies. However, few studies have examined the overall picture of wastewater treatment and reuse in WBGs, particularly inclusive of rural areas. The study produced a report that presents:

1. An analysis of the current situation with regards to:

- Water resources including supply and demand analysis
 - Wastewater availability, treatment and reuse
 - The regulatory and institutional framework governing wastewater
 - Social and environmental dimensions
 - Economic and financial aspects
 - A summary of lessons from other countries
2. Strategic recommendations that also summarize the relevant and key findings of previous sections as implications for options identification and appraisal;
 3. The appraisal framework developed for the assessment of different options, identifies and characterizes zones and highlights best options as appraised against the situation
 4. Five reuse pilot projects proposed for different areas in Palestine.

The final report can be obtained from the World Bank office in Jerusalem.

Status of Environment in Bethlehem and Hebron Districts

This consultancy, which was commissioned by ICRC aimed to assess the environmental status in the districts of Bethlehem and Hebron. The environmental assessment was primarily focused on quantitative analyses in the areas of water scarcity/impairment, wastewater management, and land use and land cover changes. The study produced a report that presents:

1. Description of the Physiography, climate, population distribution and dynamics
2. An analysis of the current situation with regards to:
 - Socio-economic dimensions
 - Water resources including water availability, supply and demand analysis
 - Groundwater and surface water quality
 - Wastewater availability, treatment and reuse potential
 - Land use and Land cover.
3. Strategic recommendations. Recommendations that are urgently needed to check further environmental and natural resource endowment deterioration. These also summarize the key findings of previous sections.

The final report can be obtained from ARIJ providing a written consent from ICRC the Water and Habitat department.

2.6 Human Resource Development.

ARIJ strongly believes that the development of human resources is a key element in creating a dynamic and innovative science and technology culture that will ultimately contribute to the well being of the country. Throughout their turbulent history, Palestinians have maintained a deep and abiding commitment to education to sustain their survival. However, the educational system in Palestine has not been able to provide a

critical mass of qualified scientists needed for the creation of sound research and development base. Therefore, ARIJ has to embark on a long term plan for promoting its human resources to build a team of well-trained and experienced researchers, managers and support staff in the fields of agricultural, environmental, GIS and water research. To improve its capacity, ARIJ has sent a number of its research staff to pursue their post graduate studies according to ARIJ needs. In addition, ARIJ provides the opportunity for its staff to attend short term training courses to promote their capabilities. To be able to implement its program, ARIJ is working towards filling the positions of its director of research and a senior hydrologist as well as a senior social scientist.

ARIJ Staff 2004

	Name	Position	Remarks
1.	Abeer Safar	Research assistant	
2.	Ahmad Ghayatha	Research Assistant	
3.	Ali Abu Rahmeh	Study leave	Study Leave
4.	Ali Ghayatha	Research Associate	
5.	Anwar Qabajeh	Research Associate	
6.	Elia Khalilieh	GIS Technician	
7.	Elias Abu Muhor	Research assistant	
8.	Fadi Isaac	Director, Computer unit	
9.	Fahd Abu Saimah	Administrative Director	
10.	Faten Jneidi	Research Assistant	
11.	Fidaa Abdul Latif	Settlements Watch Director	
12.	Fuad Daoud	Research assistant	
13.	George Kheir	Research assistant	
14.	Waddah Shamroukh	Research assistant	
15.	Ghassan Darwish	Research assistant	
16.	Helen Ghawali	Research assistant	
17.	Helen Murad	Financial Director	
18.	Ihab Lolas	Research Assistant	Study Leave
19.	Inas Bannourah	Research assistant	
20.	Isam Ishaq	Research Associate	
21.	Issa Zboun	Research Assistant	
22.	Jad Isaac	Director General	
23.	Jane Hilal	Research Associate	
24.	Juliet Bannoura	Research Assistant	
25.	Khaldoun Rishmawi	Director, WERU	
26.	Laila Saqqa	Director, Resource Centre	
27.	Manal Badra	Research Assistant	Maternity Leave
28.	Maysoun Bannoura	Research Assistant	Maternity Leave
29.	Michel Sleibi	Research Assistant	
30.	Miriam Salahat	Janitor	
31.	Moh'd Abuamriya	Research Assistant	

32.	Mohammad Ghanayem	Director of Research	Leave
33.	Nader Hreimat	Assstant Director General	
34.	Nael Jubran	GIS Technician	
35.	Nezar Handal	Research assistant	
36.	Rania Maleha	Research assistant	
37.	Raed Abed Rabbo	Public Relations Director	
38.	Roubina Ghattas	Research Associate	Maternity Leave
39.	Saher Hilal	Study leave	Study Leave
40.	Shukri Hihi	Study leave	Study Leave
41.	Sophia Sa'd	Director, GIS and RS unit	
42.	Suha Nazzal	Secretary	
43.	Suhail Khalilieh	Research Assistant	

2.7 Cooperation, Coordination and Networking

2.7.1 Cooperation with the PNA

ARIJ continues to work hard to foster a relationship of close cooperation with the various Palestinian ministries and institutions especially the Palestinian Ministry of Planning (MOP), Ministry of Agriculture (MOA), Ministry of Local Government (MLG), Ministry of Education and Higher Education (MOEHE), Environmental Quality Authority (EQA), Negotiations Affairs Department (NAD), Palestinian Water Authority (PWA) and the Palestinian Central Bureau of Statistics (PCBS).

Cooperation with the Ministry of Agriculture in

- Developing APIS web application and is in charge of updating it and training organizations how to enter their data.
- Membership of the Agrobiodiversity Steering Committee and Task Force.
- Participating in developing the Policy and Legislation for Promoting the Conservation of Agro-biodiversity in Palestine.
- Working with the FAO delegation which was invited by MOA to develop a food security strategy.
- Membership of the Coordination Committee comprising MOA and NGO's working in the field of agriculture to promote coordination and joint programs to address the emerging needs of the agricultural sector.
- Focal point for ARDI Palestine
- Working with MOA in the Danish supported Regional dry land farming project
- Membership of the Steering committee of VIFIMS.

Cooperating with the Negotiations Affairs department (NAD) in

- Preparing and analyzing Position papers
- Meetings and consultations
- Data compilation
- Providing statistical and spatial data about land use and natural resource

Cooperating with the Ministry of Education and Higher Education in

- Preparing the green paper for research Strategy and policy in Palestine.
- Attending the meetings to discuss and modify the green paper
- Preparing the white paper and lobbying for its ratification
- Participating in TEAM meetings of the EU in the field of remote sensing and GIS
- Membership of the Scientific Research Council

Cooperating with the Environmental Quality Authority in

- Monitoring environmental degradation in the West Bank through conducting field surveys and doing qualitative and quantitative analyses for different environment quality parameters.
- Environmental Awareness

- Testing small scale waste water treatment
- Working with the Palestine Standards Institution to develop the Palestinian standards of both treated wastewater and air quality.
- Waste policy analysis.
- Membership in the Environmental Group in Bethlehem Governorate.
- Environmental Impact Analysis of the proposed Philadelphi canal in Gaza.

Cooperating Work with the Ministry of local Government in

- Producing land use and urban expansion maps including the urban master plans for different municipalities.
- Providing GIS and remote sensing information for the Ministry's engineers and planners
- Conducting joint workshops to disseminate the results of the urbanization assessment
- Establishing joint committees to address urbanization issues.
- Membership of the Technical Advisory Committee for Physical Planning Project
- Developing a climatic zoning map for Palestine to be used in the housing specification and coding
- Using the GIS application to assist the Ministry in determining the location of the Palestinians land ownership whether located in Area A or B or C, before giving building permits.

Cooperating with the Palestinian Water Authority on

- Assessing the environmental impact of the Israeli colonies wastewater in the West Bank
- Exchange of data for the "SUSMAQ" project about water management in the Western Basin.

2.7.2 Cooperation with Civil Society Institutions

- ARIJ in cooperation with LRC (Land Research Centre) continues to work closely on monitoring the Israeli colonizing activities and the progress in the separation wall.
- ARIJ is a member of the national committee for land protection and leads the activities of the Bethlehem committee.
- ARIJ continued its support to the Palestinian environmental non-governmental organizations network (PENGON) through its role as the secretary and the participation in all its meetings and in the network campaign against the segregation wall.
- ARIJ is working jointly with the Palestinian Centre for Human Rights (PCHR) in Gaza in monitoring settlement activities in Gaza. ARIJ trained a number of staff from PCHR on GIS and its use in monitoring land use changes.
- ARIJ is a member of PNGO and is working actively with the network in its advocacy and lobbying work.

- ARIJ is working with local environmental NGO's in promoting environmental awareness and launching activities such as cleaning campaign and tree planting.
- The relationship between ARIJ and the Centre for Cultural Heritage Preservation of Bethlehem 2000 project was developed. ARIJ participated in the meetings organized by the center as part of the Delta project for the Middle East Cultural Heritage Preservation. ARIJ prepared a scientific paper entitled "Urban and land use patterns in Bethlehem District" which was presented in a conference in Spain.
- ARIJ initiated contacts with the department of cartography and Hasso Platte Institute at Potsdam University, which culminated in a number of visits by ARIJ staff aimed at institutional cooperation and development of joint research projects.
- ARIJ is a founding member of the Global Institute for Technology Advancement "GIFTA", which is a non-profit organization, registered in the USA and dedicated to improve the daily lives of people in the "developing countries" by promoting technology advancement.
- ARIJ is cooperating with the ICRC, OCHA, OCHR, UNEP, FAO and UNSCO by providing valuable information in its field of expertise.
- ARIJ testifies before the UN OHCHR special committee to investigate Israeli practices affecting.
- ARIJ is a member of working group 1 of the Land Water Med Network, which includes representatives from Egypt, France, Lebanon, Jordan, Morocco, Tunisia and Palestine.
- ARIJ is a member of the Habitat International Coalition (HIC) of the Housing and Land Rights Network (HLRN) .
- ARIJ worked closely with the UNEP delegation, which visited the OPT and produced a desk study on the environmental conditions in the OPT.
- ARIJ is working with FAO in its efforts to produce a vulnerability and poverty map for the OPT using the FIVIMS program. ARIJ is a member of the steering committee, which will establish the information system for improving nutrition and food security in the OPT.
- ARIJ is working with CARE international and the Agricultural Engineers Cooperative to implement a food security project in Jenin governorate.
- ARIJ is involved in the MEEF research initiative, which is coordinated by the Watson Institute of International Studies at Brown University, USA. The goal of the MEEF project is to produce policy-relevant research and publications on the ecological region shared by Palestinians and Israelis.
- ARIJ has been invited to be a member of the Joint Advisory Committee for the "GLOWA Jordan River" project within the German research program "Global Change in the Hydrological Cycle (GLOWA)" funded by the German Federal Ministry of Education and Research (BMBF).
- ARIJ is also working with the Mediterranean Eco-operation Program (MEP) in promoting regional environmental cooperation. In addition, ARIJ is a member of the Global Water Partnership (GWP).
- ARIJ is continuing its activities to promote NGO cooperation in the Arab world through the Arab NGO network.

- ARIJ is a founding member of the sustainable livelihood in drylands network in the region.
- ARIJ is also a participant in the World bank initiative entitled “ the Mediterranean Forum Development “, which aims to promoting developmental cooperation in the region.
- ARIJ is a member of the Arab Water Council and The Arab Water Network.
- ARIJ is a member of the urbanization monitoring system in Palestine within the UN habitat.
- ARIJ is the focal point for the Regional Agricultural Rural Development Initiative (ARDI).

2.8 Conferences and workshops

Despite travel restrictions on Palestinians imposed by Israel, ARIJ staff organized and attended a number of conferences and workshops that were held locally and internationally(Annex 1).

2.9 Meetings and Visits:

In 2004, ARIJ was very active in hosting a number of visitors who came either for information or developing potential partnership (Annex 2).

2.10 Dissemination of information

Since its establishment, ARIJ has published more than 120 research articles, book chapters and books in addition to hundreds of case studies that are on its homepage (Annex). Considering the restrictions imposed on movement and accessibility, ARIJ found it imperative to use the world-wide web to disseminate its findings and communicate with the world. The following tables show the number of visitors to ARIJ homepage in 2004 and the changes over the past five years.

Changes in the number of visits to ARIJ homepage between 1999 and 2004

Year	Number of Hits
1999	516,142
2000	1,277,561
2001	2,191,187
2002	1,734,378
2003	3,142,746
2004	3,904,997

It is quite evident that there is great demand on the information provided by ARIJ. While such a demand encourages ARIJ to keep up the provision of data, there is a growing concern among ARIJ staff that putting so much information on the internet may be counter productive. In several cases, the maps, figures and other data on ARIJ homepage has been used and disseminated without proper acknowledgement to the source. Considering the significance of providing reliable information on the situation in

Palestine, it was decided that ARIJ continues its current policy of disseminating the information as widely as possible despite the concern regarding the intellectual property rights. Realizing the high traffic on ARIJ's website, it was decided to expand the capacity of the internet connection for downloading and uploading using ADSL.

This year, ARIJ intensified its work to increase the local communities' awareness regarding the separation wall and the threats of Israeli colonizing activities. Towards this goal, ARIJ staff launched a campaign to promote awareness about the impacts of the segregation plan in the various Palestinian districts. In addition, ARIJ staff participated in a number of international and local TV's programs and presented the maps and data. Several presentations were made throughout the year for different international groups and decision makers as shown in Annex 3. In most cases, the presentations were distributed on a CD to the guests who have used them widely in their advocacy and lobbying work. Due to the great demand on the presentations, ARIJ found itself obliged to put it as downloadable file on its homepage where it has been published on a number of electronic journals.

2.11 Publications in 2004

1. Rishmawi, K., Isaac, J., Lehrer, D., and Afaneh, A., 2004, Development of a Scenario Management Tool (SMT) to map out possible socio-economic and environmental futures for the Dead Sea Basin, in: MEDAQUA II conference, Amman, 2004.
2. G.. Darwish, A. Safar, D. Pedersen , J. Isaac & M. Luria (2004), A comparison of air quality at Palestinian and Israeli receptor sites, in: 13th world Clean Air and Environmental Protection Congress and Exhibition, London, England, August 2004.
3. Jad Isaac and Nael Salman (2004), Jerusalem and the challenges of undermining the identity, Arab League for Education, Culture and Sciences.
4. Safar, A., Darwish, G., Nassar, A. and Eneroth, T., Rishmawi, K., and Isaac J., 2004, Analysis of Waste management policies in Palestine: Waste policy Analysis Final Report. *Presented to Tamkeen Project-USAID*, Applied Research Institute – Jerusalem.
5. ERM, ECO-Consult, ARIJ, and World Bank, 2004, Wastewater Treatment and Reuse Options Final Report. Submitted to the Palestinian Water Authority.
6. Isaac, J., Rishmawi, K., and Safar, A., 2004, Environmental Profile in the Hebron and Bethlehem District, Submitted to ICRC.
7. Isaac. J., Rishmawi, K., Safar, A., 2004, THE IMPACT OF ISRAEL'S UNILATERAL ACTIONS ON THE PALESTINIAN ENVIRONMENT, Palestinian and Israeli Environmental Narratives, 5-8 December 2004, York University, Toronto.
8. Isaac, J., and Saad, S., 2004, A Geopolitical Atlas of Palestine (the West Bank and Gaza), Bethlehem: Palestine.
9. A poster showing the Segregation wall & the geopolitical situation in the West Bank
10. Saad, S., and Isaac J. (2004). Monitoring Urban Dynamic Change in the Palestinian Territories (1989 –2004). International workshop: Geomatics for Land and

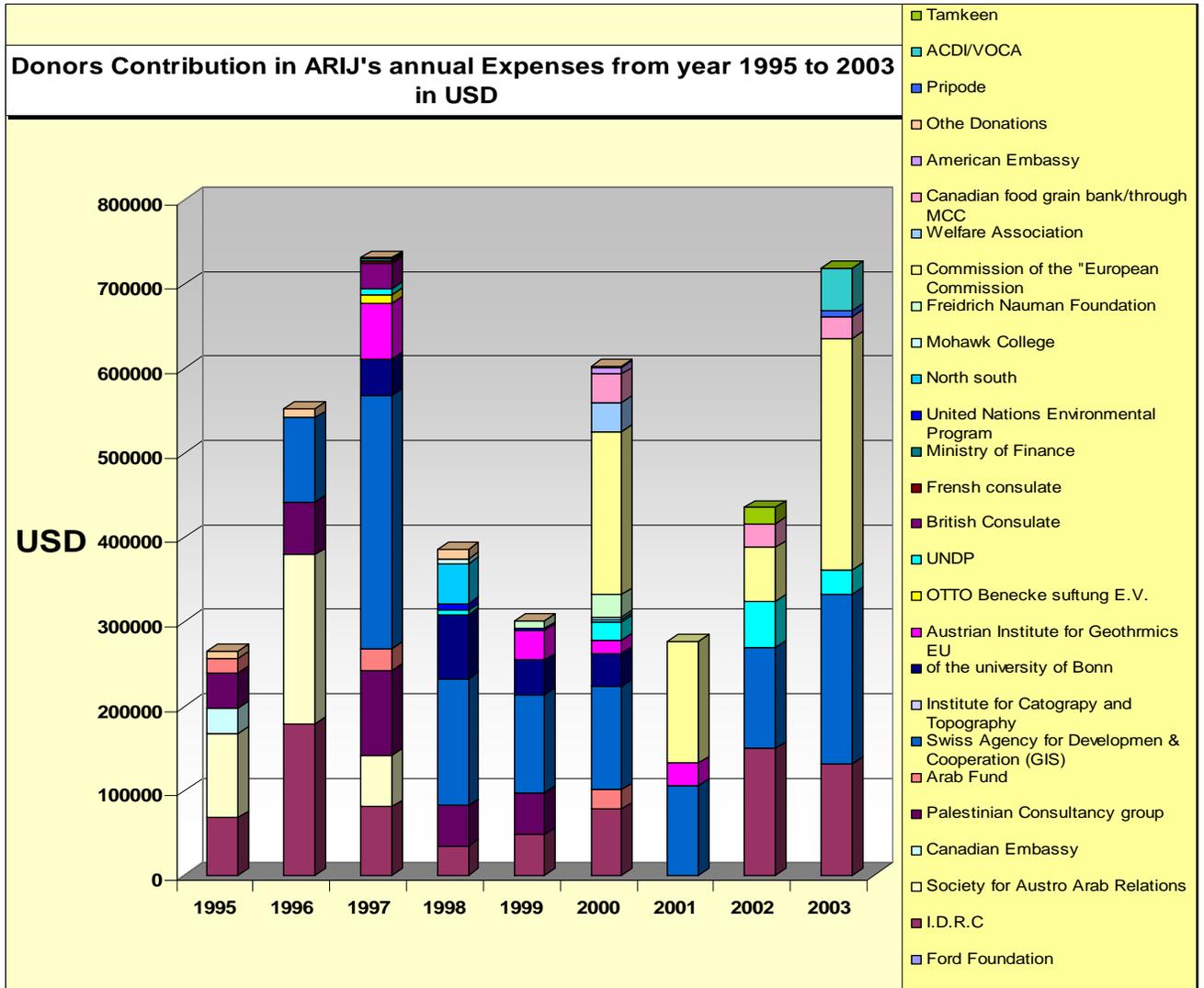
Water management: Achievements and Challenges in the Euromed context. 23-25 June 2004, Ispra: Italy.

ARIJ Case studies

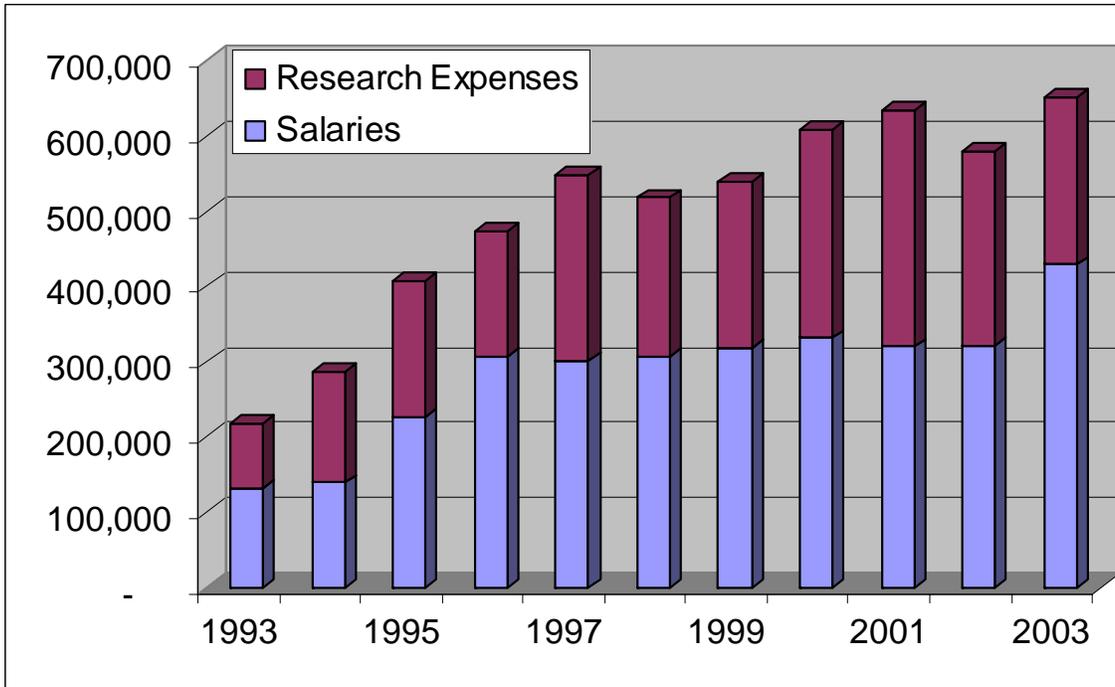
During 2004, a total number of 141 case studies and 4 quarterly reports that cover the Israeli activities in the Palestinian Territories were written and published on POICA website (the joint website between ARIJ and LRC), of which 84 case studies were prepared by ARIJ and were also disseminated on ARIJ's web-site Eye on Palestine, in addition to 12 monthly reports and 9 online publications. Annex 4 shows the titles of the case studies and reports published at POICA.

3. Funding and Sustainability

Since its establishment fourteen years ago, ARIJ has been struggling to ensure funding for its activities through submission of specific research projects to funding agencies. ARIJ has been receiving financial support for specific research projects from a variety of international governmental and non-governmental organizations including the Swiss Development Cooperation, the European Commission, the International Department for Development Cooperation through the Society for Austro Arab Relations (SAAR), the International Development Research Centre, Tamkeen, Middle East Research Cooperation, Canadian Food Grain Program, Ford Foundation, the Arab Development Fund and the Welfare Association. The following graph shows donors contribution to ARIJ budget for the period 1993 – 2003.



The nature of most granting systems means that ARIJ has to be creative and find new projects every couple of years. Considering the political situation and donor shift towards emergency and relief, ARIJ's efforts to continue guaranteeing funding for its activities has been hampered. It became increasingly difficult for ARIJ to cover all its operational expenses by working on a project basis. Consequently, ARIJ sought the support of SDC for a core funding program to enable ARIJ to continue its operations under the current situation of uncertainty. This support allowed ARIJ to continue offering its services to all Palestinian institutions and count on research projects and consultancies to cover a good portion of its operational expenses. The following graph outlines changes in ARIJ's budget since 1993.



ARIJ held a series of brainstorming sessions that involved the staff, board members as well as local and expatriate professionals that aimed at addressing the issue of its sustainability. The following alternatives were proposed and actions taken.

- **Creating an endowment.**(\$200,000 of savings throughout the past 14 years have been allocated by the Board as a seed endowment for potential add up form donors)
- **Diversifying the sources of funding.** (ARIJ is shifting towards multilateral and international funding sources)
- **Securing medium term support for its overall program.** (ARIJ is working towards building a consortium of donors for its core program funding)
- **Increasing the number of local consultancies.** (Progressing)
- **Executing international consultancies.** (Progressing)
- **Providing paid services locally and internationally.** (Progressing)
- **Generating income from the sales of its publications.** (Progressing)
- **Establishing affiliations with international research institutions and universities.** (Progressing)
- **Securing funding from the PNA for its operations.**
- **Investing in potential income generating projects** that link the results of applied research with the local community. (New Farm)
- **Investing in a building.** (A two-story building with a total area of 610 m² at a skeleton stage was purchased which is located not far from the current site. ARIJ is now looking for potential fund to cover the cost of interior construction and furniture).

4. Work Plan 2005

4.1 Institutional Development

During the coming years, ARIJ will be working on developing its institutional capacity in light of the recent political developments as well as the internal and external evaluation conducted. In particular, ARIJ will be working on the following:

4.1.1 Administration and Management

- Developing a Grants Management procedures manual.
- Developing ARIJ's internal regulations.
- Development ARIJ,s financial management System.
- Establishing Internal Auditing and Quality insurance.
- Developing IT control and management procedures.
- Completing the office automation application system
- Developing an integrated administration system for ARIJ.
- Developing a database application for all ARIJ archives,
- Developing a new ARIJ web site with a database back end and portal system.
- Increasing security on ARIJ system and the web applications that ARIJ developed.
- Expansion of its board

4.1.2 Organizational Development

- Restructuring its research units to meet the new challenges

4.1.3 Infrastructural Development

- Finishing the construction work in the new building
- Exploring the potential of establishing an environmental technology institute and an urbanization monitoring center.
- Establishing the first Palestinian ecovillage at Ghalaktion
- Working on improving the Video conference capabilities in Palestine in coordination with Bethlehem University and Al Quds university.
- Upgrading its computer system and network.

4.1.4 Human Resource Development

- Developing a strategy to retain and develop its human resources.
- Working with Bethlehem University and the University of Pavia in developing an M.A program in international development.

4.1.5 Planning and Monitoring

- Developing a Logical Framework for ARIJ that links objectives with strategies and performance indicators.

- Identifying and documenting the environmental factors affecting its operations including success factors and developing a plan to benefit from those external factors or to mitigate the risks resulting from them.
- Regularly conducting a SWOT analysis.
- Implementing an internal audit function based on current and future expected activities of ARIJ.
- Updating its MTP plan

4.1.6 Risk Assessment

- Developing a formal risk management process to clearly identify all types of risks affecting ARIJ operations.

4.1.7 Conducting a Stakeholder and Impact Analysis

4.1.8 Research Program development and networking

- Promoting research linkages and affiliations with local and international research institutes
- Developing ARIJ as a centre of excellence in its area of expertise
- Promoting cooperation and coordination with local research initiatives at both governmental and non-governmental levels.
- Building a relationship with the local industries

4.1.9 Improving its sustainability through

- Increasing the endowment.
- Diversifying the sources of funding.
- Securing medium term support for its overall program through core funding .
- Increasing the number of consultancies.
- Generating income from services locally and sales of its publications.
- Establishing affiliations with international research institutions and universities.
- Securing funding from the PNA for its operations.
- Investing in potential income generating projects that link the results of applied research with the local community.

4.2 Implementing the following funded research projects

4.2.1 Analysis of Urban Trends and Land Use Changes in Gaza Strip Between 2001 – 2004

Great concern has emerged in recent years about uncontrolled urban expansion in Gaza Strip, in the form of both Palestinian and Israeli settlements and their associated infrastructure. The expansion of built-up areas has significant environmental ramifications. Urban developments and infrastructure encroach on agricultural and grazing land creating additional pressure on the limited Palestinian natural resources. This research study, supported by IDRC, will quantitatively and qualitatively analyze urban development trends in Gaza Strip via time series Satellite images. The project also aims to assess the impacts of this urban development on both land use and on local

Palestinian communities in Gaza Strip and make projections of possible future trends of urban expansion in the study areas. The main objective is to assess the impacts of rapid urbanization in Gaza Strip on both land use and local Palestinian communities via time series Satellite images (IKONOS images in 2001, SPOT 5 image in 2003, and SPOT 5 image in 2004). In addition, it will assess the impact of the Israeli practices since the eruption of the current Intifada. This research project has commenced on January 1st, 2005 and will continue till December 31st, 2005.

4.2.2 Improving Plant Production to Enhance Household Food Security in Marginalized Communities of Bethlehem Governorate (Phase Five)

The project aims to continue and expand the activities of the Mennonite Central Committee (MCC). Canadian Foodgrains Bank (CFGB) supported project that has been on-going for the last three years. That is, "... to enhance the sustainability of the rain-fed farming system and improve food security". The strategic goal of the project is to improve household food security of poor and marginalized households in 10 villages of Bethlehem Governorate through supporting the cultivation of field crops, forages, dryland vegetables and planting range land bushes in addition to continuing the work on seed improvement and breeding program.

4.2.3 Improving Plant Production to Enhance Food Security of Farming Communities in Rural Areas of Bethlehem Governorate.

Through engaging 287 households in agricultural activities, the project, which is supported by ACDI.VOCA aims to increase the production of most consumable crops to improve the living conditions of farmers inhabiting Bethlehem Governorate. A minimum of 240 households will be targeted for the rainfed seed demonstrating program encouraging them to cultivate 1200 dunums of drought resistant field crops and forages varieties. 197.6 tons of cereal and legume seeds and 296.4 tons of hay are expected to be produced over the two years. In addition, green houses will be constructed over 20 dunums for 51 households. It is expected that 321 tons of fruit vegetables would be produced at the end of the two years. The project also aims to establish 15 top-roof rainwater-harvesting cisterns with a capacity of 70 cubic meters per year at household level (15 beneficiaries). The collected water will be mainly utilized for irrigation of vegetables, herbs, and trees through the cultivation of 15 dunums with leafy & fruit vegetables, sage, and thyme. Such an intervention will increase the availability of self-produced food at the household level where 22.45 tons, 16.7 tons, 18.5 tons of vegetables, herbs, and trees will be produced respectively.

4.2.4 Sustainable Access to Food and Economic Security in Jenin (SAFES Jenin)

ARIJ is implementing this project jointly with Care International and Agriculture Engineers Cooperative (AEC) through funding from the European Commission. The SAFES Jenin project aims to improve food security for 763 poor and marginalized Palestinian households in ten villages in the Jenin District of the West Bank. The targeted villages are characterized by their vulnerable populations, high dependency on the Israeli labour market, lack of access to nearby cities and towns, lack of easy access to water, and, in some cases, proximity to the newly built 'security' wall. The project is

comprised of an integrated set of activities that are designed to increase the capacities and skills of beneficiaries, to strengthen community participation, and to provide sustainable livelihoods for the residents of Jenin District. Activities include: the introduction of high-yielding small ruminants, diverse crops, and water conservation systems; training and extension services in animal husbandry, water resource management, and small-scale agriculture; and, the development of village-based producer and marketing cooperatives or associations.

4.2.5 An emergency Program for Enhancing Household Food Security of Farming Communities in Rural Areas of Bethlehem, Hebron and Tubas Governorates.

The strategic goal of the project, which is funded by the Spanish Cooperation is to improve food security of 680 poor, marginalized and poor households in 20 villages of Bethlehem, Hebron, and Tubas Governorates through improving water resource management, increasing plant production, improving livestock conditions, with increased capacities, skills, and community participation.

ARIJ will target 80 households (eight households per each locality) by increasing water availability through the construction of 80 top roof cisterns and use the water for irrigation, livestock drink, and/or for household. Additionally, 100 households will be provided with planting material to cultivate vegetable and herbs crops. Twenty farmers from Artas village will have the opportunity to rebuild the destroyed part of the village irrigation canal. In addition, 1050 dunums of fields planted with vegetables in Tubas district and were damaged by frost will be replanted. Also, the project will rehabilitate 30 sheep and Goats barracks in six different village of Bethlehem and Hebron and provide 240 households with field crops and forages crops seeds to cultivate 1200 dunums. Throughout the implementation of the project, ARIJ will be working to strengthen and support these activities with extension visits and on site capacity building.

4.2.6 Monitoring Israeli Colonizing Activities In The Palestinian West Bank & Gaza (phase II)

ARIJ has been performing this project since 2000 in cooperation with the Land Resource Center LRC. The project is funded by the European Commission and aims at disseminating information on Israeli colonization by monitoring Israeli colonization activities through the collection of primary and secondary data and the analysis of colonies land use changes. Also, the project studies the political and socio-environmental consequences of Israeli colonies on surrounding Palestinian communities. The main activities revolve around obtaining relevant information about Israeli colonization as well as disseminating such information. This project is continuing to serve as a platform for reliable data on Israeli colonization needed in the course of negotiations.

4.2.7 PRIPODE

This research project started on September 2003 and will be done on September 2005. The project is a pilot study attempting to develop policy tools and choices to implement the national urban and environmental policies at the local or municipality level through the integration of sustainable development concepts and public participation. The project

will deal with the interaction between population, urban development and the environment with special emphasis given to demographic factors, land use and the urban environment at the main municipalities in Bethlehem district as the focus of this research project. In 2005 the research team will analyze the entered data, reformulate and develop the current policies and legislations to become applicable on both local and national levels, discuss the first draft of the formulated policies with the decision makers and discuss the formulated policies with the general public.

4.3 Implementing the following potentially funded projects

4.3.1 Assessing Environmental and Natural Resources Sustainability in a Future Palestinian State

This project, which has been submitted for IDRC for potential funding aims at analyzing the environmental. resource system implications of different available options for Palestinian statehood (peace initiatives, unilateral Israeli disengagement, Palestine within 1967 borders). The Core question guiding the research process will be: How can environmentally sound development be achieved? What do current developments, like the construction of the isolation wall, mean for the natural resource sustainability in a future Palestinian state?

In order to ensure that the project achieves its proposed objectives, the research team will first focus on the assessment of the sustainability of environmental goods and services in a future Palestinian state under different conflict settlement scenarios. The project will attempt to explicitly understand the causal relationships, interactions and feedbacks, between the physical system and the human system. Data, information and knowledge between the human dimension (economy, sociology etc) and the physical dimension (hydrology, ecology, agricultural, water planning) are linked under different conflict settlement plans.

4.3.2 Monitoring the Impact of Israeli Occupation practices on the Socio-Economic Conditions in the Occupied West Bank

This project, which has been submitted for the British Government for potential funding will aim to monitor the impact of Israeli Occupation practices on the socio-economic conditions of the Palestinian people. Related indicators will be identified to measure changes in the situation in terms of the occupation's impacts on factors such as accessibility, curfews, direct destruction, deprivation of resources, and the economic and social consequences of these impositions. Some indicators will be available for all of the West Bank, such as area of land confiscated, uprooting trees, and houses demolished and other difficult to obtain indicators will be monitored in a sub-set of localities. In keeping with the goal of the project, these localities will be selected so as to be indicative of *changes* in the situation rather than purporting to sample the entire territory. Raw data, tabular and graphical time series, and derived indicators will be available to the Palestinian National Authority, international community via an on-line database to respond most effectively as conditions change over time. In addition, monthly and

quarterly reports will provide a synthesis and commentary of the socio-economic situation in the West Bank.

5. Other Activities

- Developing an interactive atlas of Palestine
- Developing the Spatially Referenced Palestinian Environmental Information System in a stand alone application for proper dissemination.
- and Updating the Palestinian Environmental Information System using Mapserver.
- Producing a remote Sensing Atlas of Palestine
- Locally manufacturing and the testing of the efficiency of the Small Scale wastewater treatment plant

6. Provision of services and participation in activities

ARIJ plans to promote further cooperation and joint work with the Palestinian ministries and national institutions. ARIJ will continue providing different types of services for the local Governmental and non-governmental institutions, in addition, to the local people in its relevant fields of specialty. ARIJ will also provide services through continue monitoring and updating the Israeli activities and its new orders in terms of colonies expansion, check points, by pass road and recently the progress in constructing the Israeli segregation wall and its impact on the Israeli-Palestinian conflict resolutions and the Palestinian socio-economic, environmental, and security status.

7. Executing Consultancies including

- FIVIMS (FAO)
- Urban Monitoring(Habitat)
- Agrobiodiversity GIS (UNDP)
- APIS (Spanish Cooperation)
- Land use Southern Hebron (MOA)

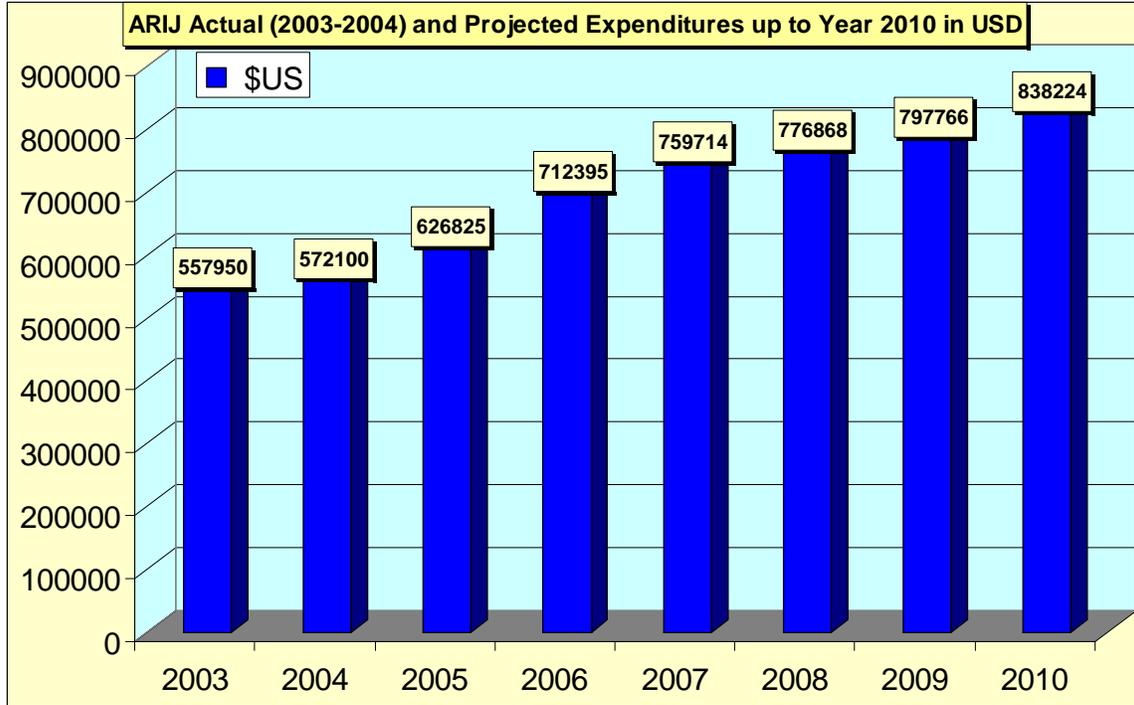
8. Developing New project proposals

- Assessing Land Degradation./ desertification.
- Eco-geographical Survey of the Wild Legumes.
- Inventory of Palestinian Forest Trees.
- Conservation of Forage Legume Plants in Palestine.
- Impact of Climatic Change on Palestinian environment.
- Assessing small scale waste treatment plants and reuse.
- Risk Assessment of industrial zones.
- Developing Sustainable Development Indicators for Palestine.
- Jordan Valley Information System (JOVIS)
- Transboundary Watershed Information System (TWIST)

- Environmental Sustainability for a better life: An integrated Approach for Localizing Agenda 21 in the Bethlehem District
 - Compiling an Integrated Socio-economic and Physical Infrastructure Database for the Palestinian localities in the West Bank.
 - Surveying and documenting the status of Palestinian olive trees in the Palestinian Territories.
 - Producing a Security Configuration Expert System (SCES)
 - Monitoring Settlements in the Occupied Golan Heights: History, Present and Future Perspectives.
 - Monitoring the Israeli activities in the Occupied Palestinian Territories and assessing their impacts on the viability of a future Palestinian statehood
 - Integrated Watershed Management in Qalqiliya and Salfit Districts
 - Water Harvesting and Wastewater Reuse: Towards Developing the Water Resources in the Bethlehem and Hebron Governorates
 - Establishing a Compost Facility in the Halhul Region.Hebron
- 

5. Estimated Budget

The following graph shows ARIJ's estimated budget for the coming five years as per the mid term stargey.



Annex 1
Conferences and Workshops

Date	Name of the work shop/ conference	Participants
5/1	The 2 nd international academic conference on "an end to occupation, Just peace in Israel-Palestine ; towards an active international network, organized by MIFTAH and FFIPP (Faculty for Israeli Palestinian peace)	Jad Isaac
14/1	Meeting of the regional partners for the Dead Sea project	Jad Isaac, Khaldoun Rishmawi and Abeer Safar
23/1	Participating in local book exhibition in peace center in Bethlehem	Leila Saqqa and Raed Abed Rabbo
17/2	PCBS workshop regarding the results of surveying the Palestinian built up areas 2003.	Nader Hreimat
22/2	Campaign against the wall with Bethlehem governorate and other NGOs.	Jad Isaac, Raed Abed Rabbo, Nael Salman and Issa Zboun
22-29/2	Twentieth Annual 2003-2004 Area Studies Symposium: Nature, War & Peace (Gettysburg College, Messiah College & York College), Pennsylvania, USA	Abeer Safar
23/2	ICJ ruling support activity	Jad Isaac & Raed Abed Rabbo
25/2	FAO workshop on FIVIMS	Jad Isaac
25/2	Planting trees with Beit Sahour municipality and other NGOs partners	Raed Abed Rabbo
4/3	Conference organized by Ercolano City Mayor and Italian Parliament members in Naples concerning the wall and its impacts.	Raed Abed Rabbo
4/3	Wastewater Treatment and Reuse Workshop, organized by the World Bank and PWA	Jad Isaac and Khaldoun Rishmawi
8/3	Inauguration of the ITC at Al-Quds university.	Jad Isaac
9/3	Scientific Research workshop organized by the ministry of education and higher education	Jad Isaac
11/3	On the occasion of "Women International Day: A Lecture at Bethlehem University about Israel's unilateral actions in the Occupied Palestinian Territory.	Juliet Bannura
12/3	Arab thought Forum workshop on democratic transformation.	Jad Isaac
16/3	Open Forum meeting on "Immigration from Bethlehem" organized by the Duhaishe refugee camp committee.	Jad Isaac
25-26/3	PRA (Participatory Rapid Appraisal) workshop organized by the Labor Intensive Community Development program (LICDP)	Raed Abed Rabbo
31/3	Workshop on environmental protection and biodiversity conservation in Palestine organized by the environmental education centre at Talitha Kumi school.	Raed Abed Rabbo
1/4	Functional guidance day organized by Bethlehem university	Raed Abed Rabbo
20/4	Conference on the Politics of Humanitarianism in occupied territories. Organized by Van Leer Institute	Nael Salman

29/4	Briefing to the representatives of the European Union concerning the latest updates in the settlements expansion issue.	ARIJ and LRC
27-28/4	FIVIMS workshop	Sophia Saad
30/4	Environmental exhibition in Bethlehem for private schools at the Peace center.	Raed Abed Rabbo
5/5	Environmental exhibition/ Spring festival organized by wildlife society	Raed Abed Rabbo
16/5	Stop the wall campaign activity , Beit-Jala.	Jad Isaac, Nael Salman & Raed Abed Rabbo
19/5	FIVIMS technical workshop	Sophia Saad
27/5	Information Technology IT workshop organized by ARIJ with the participation of IT professionals, head of faculties from the Palestinian universities concerning future joint research and cooperation.	Jad Isaac, Saleem Zoughbi, Issam Ishaq, Fadi Isaac, George Kheir and Michael Slebi
10/6	Waste Management Analysis Workshop organized by ARIJ.	Jad Isaac, Khaldoun Rishmawi, Abeer Safar and Ghassan Moh'd.
13/06	Analysis of Waste Management Policies in the Gaza Strip organized by ARIJ	Khaldoun Rishmawi and Ghassan Moh'd
14-15/06	MEDAQUA II Water Conference, Amman, Jordan	Khaldoun Rishmawi
14-25/6	International Program for Development Evaluation Training (IPDET), IDRC	Sophia Saad
16-19/06	Dead Sea Project Meeting 5, Amman, Jordan	Khaldoun Rishmawi
17/6	Participating in a work shop with the ministry of local government in Bethlehem, USAID, UNDP-LRDP concerning the role of joint local councils in development and reform.	Raed Abed Rabbo
18/6	Participating in the conference (Critical assessments of Arab Political Reform) organized by the Palestinian Initiative for the promotion of global dialogue and democracy MIFTAH, and the Coalition for Accountability and Integrity AMAN in Grand Park Hotel in Ram Allah	Jad Isaac / Raed Abed Rabbo
21-25/6	Communication Strategies in local agenda 21 participation process AZAHAR Programme, Spain	Khaldoun Rishmawi
23-24/6	Workshops for the agriculture unit for the farmers whom benefit from the green houses and inviting a special lecturer to teach them how to plant and increase their product.	Nader Hreimat, Ali Ghayatha & Moh'd Abu Amriyyah
23-25/6	Land and Water Med project meeting, Italy	Jad Isaac
28/6-1/7	SUSMAQ Project Workshop: Sustainable Assessment and Management of the Palestinian Water Resources organized by PWA	Abeer Safar
30/6	Participating in a conference in Van Liere university in Jerusalem with SHAMEL Institute concerning Politics of humanitizim.	Nael Salman
1/7	Workshop for the greenhouses benefited farmers from food security	Nader/ Ali

	project agriculture conducted at ARIJ. This was a starting session of seven days training program.	
2-5/7	Participating in the 3rd International Academic conference on an end to occupation, A just peace in Israel – Palestine: An international Network in Action organized by FFIPP	Jad Isaac
7/7	Activity against the wall in Al Ram	Jad Isaac & Raed Abed Rabbo
7/7	Presentation about the Segregation Wall and the geopolitical situation in the West Bank presented to the protest tent in Al Ram	Fida' Abdel-Latif
15/7	Workshop to discuss the ICJ ruling regarding the wall organized by ARIJ and led by advocate Anton Salman.	ARIJ staff
18/7-1/8	Participating in a workshop in Ireland organized by the Glen Cree Peace Center on the issue of Boundaries and conflict.	Rania Maleha
22-28/7	Regional Consultation on: “Women’s Right to Adequate Housing and Land” in Alexandria, Egypt.	Fida' Abdel-Latif
3/8	FIVIMS workshop organized by FAO and MOA	Jad Isaac/ Khaldoun Rishmawi/ Michael Sleibi
4/8	13 th world Clean Air and Environmental Protection Congress and Exhibition, London, England.	Ghassan Moh'd
8/8	Urbanization workshop organized by ARIJ under the auspices of the Minister of Local Government	Jad Isaac, Nader Hreimat, Nael Salman & Sophia Sa'ad
10/8	Agrobiodiversity workshop organized by MOA	Jad Isaac
1/9/004	EXBOTECH Exhibition in Ram Allah.	Fadi Isaac, / Michael Sleibi and Nizar Handal
4/9	Palestinian Cultural Heritage organized by the Ministry of Culture	Jad Isaac
13-14/9	United Nations International Conference of Civil Society in Support of the Palestinian People: “Ending the Occupation – A key Prerequisite for Achieving Peace in the Middle East”	Jad Isaac
13/9	Dryland farming workshop organized by ARIJ	Nader Hreimat and Moh'd Abu Amriyyah
22/9	PNGO workshop with donors to initiate a process of dialogue and communication between Palestinian NGOs and the donor community,	Raed Abed Rabbo
24/9	Workshop at the YMCA – Beit Sahour	Juliet Bannura
27/9	Fourth Meeting of the Euromed Working Group on navigation by satellite, Egypt	Sophia Saad
30/9	Pripode workshop with the municipality of Beit Sahour	Nael Salman & Fidaa Abdul Latif
3/10	Workshop on organic farming organized by PARC	Ali Ghayadah
6/10	Salzburg Seminar	Jad Isaac
6/10	Information planning workshop organized by TAMKEEN	Nader Hreimat & Fadi Isaac

11/10	Workshop on “ <i>Good Proposal Writing</i> ”organized by the United States Consulate in Jerusalem.	Fidaa Abdul Latif
27/10	Consultative meeting organized by USAID	Jad Isaac
10/11	Conference in Tel Aviv university in title of “Together but Apart”	Fida’ Abdel-Latif
2-4/11	Cities of collision conference in Van Leer Institute	Jad Isaac, Fida’ Abdel-Latif, Nael Salman, Juliet Bannura
22/11	Perform a presentation for German, Palestinian and Jewish students in Bezalel Academy of Arts and Design in West Jerusalem about the political aspects of maps	Fida’ Abdel-Latif
27- 29/11	Youth Exchange Conference	Juliet Bannura
30/11	TAMKEEN REGIONAL Meeting/South Region	Khaldoun Rishmawi
2/12	Environmental Legislation and Institutionalization, EQA-Ramallah	Abeer Safar and Khaldoun Rishmawi
8/12	Workshop on the International Humanitarian Law Forum on the Legal Aspects of Israel’s Disengagement Plan and International Humanitarian Law organized by Diakonia and the Association of International Developmental Agencies (AIDA)	Suhail Khalilieh
8/12	Human Right's Learning Conference - Ramallah	Juliet Bannura
11/12	First Palestinian Yearly Wastewater Seminar in the West Bank organized by the Palestinian Wastewater Engineers Group	Abeer Safar
16/12	A Lecture in Battir Village, Bethlehem about Israel's unilateral actions in the Occupied Palestinian Territory.	Juliet Bannura, Issa Zboun
18/12	Workshop on the Palestinian human developmental report.organized by the ministry of planning and Beir Zeit university.	Raed Abed Rabbo & Nael Salman
18/12	Workshop on civil society performance indicators organized by Bisan Center	Jad Isaac
20/12	Workshop on the role of civil society institutions in sustainable development organized by the Palestinian Media & Development Institute.	Jad Isaac, Abeer Safar, Fida’ Abdel- latif & Khaldoun Rishmawi

Annex 2
Visits and Meetings

Date	Meeting / Visit
3.1	CARE.
3.1	CARE.
7.1	Belgium cooperation office
9.1	Mr. Timothy Rothermil, UNDP General Director.
12.1	British political attaché
12.1	Dr. Sufian Sultan director of Environmental Quality Authority.
15.1	Mr. Gerhard from the German representative to the PNA.
19.1	British consulate delegatio.
19.1	World Council of Churches
22.1	OHCHR.
23.1	British minister of state for foreign affairs Baronette Simons.
27.1	Tamkeen.
11.2	Bettina Moshedet from the EU.
10.2	SDC.
17.2	Minister Salah Al Tamary
17.2	Head of the district office of education and higher education.
18.2	Journalists from MCC.
21.2	German representative office to the PA
25.2	World Bank.
25.2	CRIC
26.2	ICRC.
26.2	CARE.
26.2	FAO.
8.3	Beit Jala Municipality.
9.3	CRIC
24.3	European Union Delegation.
26.3	Consul General of Spain Jose and Spanish cooperation
30.3	ICRC.
1.4	Delegation from the Churches for middle east peace.
2.4	Students from Eastern Mennonite University.
3.4	Members from the French consulate.
5.4	CRS.
5.4	Delegation from JRC (Joint Research Center) from the European Union.
17.4	Political attaché in the Egyptian consulate.
27.4	FAO.
27.4	ICRC
27.4	Beit Jala municipality.
4.5	The Swiss Import Promotion Program (SIPPO)
8.5	Van Leer Institute
8.5	Bruce Stanley , External Evaluator for EU projects.

10.5	Van Leer Institute
12.5	Mr. Mario Carera Director of SDC.
13.5	GIFTA.
13.5	ICRC.
19.5	IDRC
19.5	FAO.
19.5	ACDI VOCA
19.5	Representative from the American consulate.
24.5	CARE.
25.5	Governor of Bethlehem.
25.5	International Management Group (IMG) and the European Commission Humanitarian office ECHO.
27.5	ICRC.
1.6	FAO delegation
7.6	National and popular committee against the wall.
12.6	Pavia university in Italy.
16.6	FAO.
23.6	BIMKOM
28.6	ICRC.
28.6	ICRC
29.6	Spanish cooperation.
29.6	ICRC delegation.
30.6	Spanish cooperation.
30.6	FAO.
4.7	Governor of Bethlehem.
9.7	French Consulate.
12.7	Legislative council members in charge of settlements
17.7	PCBS.
21.7	Arab Thought forum.
28.7	CRIC
31.7	PHG.
9.8	ACRI & Bimkom
9.8	Martha Lorenzo head of the Spanish cooperation office.
12.8	ICRC.
12.8	CRIC
12.8	Mr. Scott Mcniven The General Director of ACDIVOCA.
14.8	CRIC
17.8	Land Research Center.
21.8	Lawyer Ramzi Baqleh from Saint Eve.
24.8	Integrated Media Faculty of Arts in Toronto.
25.8	Italian Cooperation.
31.8	MCC
1.9	Canadian consultant Sam Vander Ende with MCC and the food grains bank
8.9	German Representative office.

9.9	UNDP.
11.9	Peres Peace Center.
12.9	Mr. Greg Shapland, Head of the Middle East Department., British Foreign Affairs
15.9	Private Sector Developmental Center.
22.9	Saint Eve
26.9	General Assembly for New Farm company.
27.9	Welfare Association.
29.9	EU delegation
30.9	Cultural Heritage Centre
1.10	SDC delegation
2.10	Governor of Bethlehem
2.10	Mr. Hana Theodory director of American Development foundation office in Jerusalem.
3.10	Mr. Christian Berger from the European Commission.
5.10	PHG.
5.10	Habitat, United nations Human Settlements Program.
7.10	Water Quality control engineers from the ministry of health.
11.10	Mr. Holger Tellman, Political Attaché . German representative office.
15.10	Mr. Mark Otte, EU special envoy to the Middle East
21.10	Donor meeting
25.10	EU delegation.
25.10	Jews For Justice in Palestine.
26.10	Governor of Bethlehem.
28.10	Ministry of education and higher education.
2.11	United Nations special Rapporteur for Human rights Dr. John Dougard
6.11	Legislative council members in charge of settlements
7.11	ICRC Delegation.
8.11	Minister of agriculture and deputy minister
12.11	IDRC.
20.11	German Parliamentarian delegation with the German representative office in Ramallah.
22.11	ACDI VOCA.
22.11	Golan for Development
2.12	CARE.
5.12	Tamkeen.
5.12	CIDA.
5.12	Spanish cooperation and Spanish NGOs.
13.12	FAO.

ANNEX 3
Presentations

Date	Audience
6.1	American NGO delegation on a fact finding mission
10.1	SDC delegation
11.1	HCEF delegation
12.4	Delegation from Churches for peace in the Middle East
15.1	Korean students delegation
15.1	American academic delegation
22.1	EU delegation
24.1	Tubas public meetings
28.1	French delegation
29.1	MCC delegation
29.1	American delegation .
31.1	British delegation
3.2	Delegation from the Open Society Institute (OSI) of the SOROS foundation.
4.2	Students from Bethlehem Bible college
11.2	UN delegation headed by the special Rapporteur for Human rights Dr. John Dougard
18.2	MCC delegation
19.2	Public meeting at the Orthodox club in Beit Sahour
21.2	CPT delegation
27.2	American delegation
27.2	American delegation
28.2	Swedish delegation
8.3	Norwegian delegation
13.3	American delegation
14.3	American delegation from the Holy Land Christians Society
24.3	American delegation
26.3	Spanish Delegation headed by HE the Consul General of Spain
27.3	MCC delegation
1.4	American delegation
8.4	YMCA delegation
13.4	MCC delegation
14.4	Italian delegation
16.4	Public presentation at the environmental educational center in Talitha Kumi school concerning agro biodiversity and environment.
17.4	EU delegation headed by Mr. Jan Thesleff, General Secretary and Consultant in the European Union for the peace process in the middle east
20.4	MCC delegation
20.4	American delegation
30.4	Swiss delegation headed by Ambassador Remo Gauthi, deputy director general at the Swiss agency for development and cooperation.

3.5	German delegation
6.5	American students delegation
12.5	EU delegation
13.5	EU delegation
14.5	Public presentation at Duheishe refugee camp
15.5	MCC delegation
21.5	Swiss delegation
28.5	CPT delegation
1.6	Delegation from the Ecumenical Accompaniment programme
8.6	American delegation
8.6	Public presentation in Al Khader village
12.6	Public Presentation in Ramallah
17.6	UN special Rapporteur for violence against women Mrs.YAKIN ERTURK
19.6	UN special Rapporteur for human rights Dr. John Dougard
21.6	Canadian delegation
22.6	American delegation from the Faculty for Israeli Palestinian Peace (FFIPP)
5.7	MCC delegation
24.7	Public presentation in SOS village in Bethlehem
27.7	CPT delegation
29.7	Presentation at the Palestinian Legislative Council in Ramallah
1.9	Delegation from the Ecumenical Accompaniment Program in Palestine (EAPPI).
15.9	American delegation
16.9	Norwegian Solidarity Movement Delegation
16.9	Anglican Peace and Justice delegation
23.9	EU delegation
5.10	Lutheran church delegation
6.10	Art Teachers at Dar Al Nadwah
8.10	German delegation
16.10	German Journalists delegation
22.10	American delegation comprising the advisory committee on social witness of the Presbyterian church (USA)
23.10	German students delegation
18.11	American student delegation
19.12	American delegation
27.11	CPT delegation
29.12	Spanish delegation

Annex 4
Case Studies 2004

1. Israeli Security on the Expense of Palestinian human Rights.
2. World Silence is an Incentive for new Israeli violations.
3. Israel's new border plan north of Bethlehem.
4. Intensification of house demolition campaign in Gaza Strip during the year 2003.
5. Israel Bottleneck Visitors to Palestinian Territories Another Israeli Act of Desperation.
6. Outposts: the Unripe Settlements.
7. Living in a Cage.
8. The Isolation of Budrus Village – Ramallah.
9. ARIJ Staff Detained while on Duty.
10. The Holy City ... The Fatal Change.
11. The Israeli campaign of house demolition in Occupied Jerusalem during 2003.
12. Another act of Israel's brutal policy in Burqin Village, Jenin Governorate.
13. For the safety of Israeli settlers on roads !!
14. Israeli Wall constructed ... Palestinian houses demolished.
15. To Pullout from Gaza! ... A Daring Step or Just a Tactical One..
16. Bethlehem 59.
17. Israeli Settlers Annex More Lands in Tequ' town.
18. Wipeout of Palestinian Houses in Al-Khader Village.
19. Jericho: a new peninsula.
20. Israel's systematic war against historical Palestinian buildings.
21. .Impact of Segregation Wall on Silat Al Harithiya town.
22. Daily suffering of Al Mawasi residents.
23. The Wall strangulates 'Anata and cuts off Shu'fat camp.
24. Abu Dis: A Palestinian Town Tarred by the Israeli Wall.
25. Oppressive Israeli measures cripple Palestinian Camps in Gaza Strip.
26. Digging deep into the Palestinian Territories: "The Wall penetrates lands of Metulla village, Jenin.
27. Israeli Law in Occupied Jerusalem ?Building is Prohibited: Demolition is Allowed ?
28. A battle of will, Beit Surik, Qattanah & Beddo Villages: An Agricultural Triangle Under Israeli Attack
29. Mas-ha: A village robbed by the Segregation Wall.
30. Construction of Separation Wall is under way.
31. Impact of Segregation Wall on people and land of Deit Al Ghusun town, Tulkarem district.
32. The Segregation Wall Plan in Hebron Governorate
33. War against trees and sheep.
34. Land Grab continues in Bethlehem District.
35. Walls ... Today's Fashion in Israel.
36. Installation of Wall blocks at Bethlehem Northern entrance.
37. Wall removal or play of route.
38. Expenditure of Israel Colonial Activities for the First Quarter of 2004.

39. Targeting homes and factories in the village of Jalbun.
40. Curfew Continues in Bethlehem Eastern towns
41. Under security claims: Israel to confiscate more lands from Kafr Thuluth town.
42. Israeli Show of Force in Bethlehem city.
43. Irtah: a new border paralyzed by the Wall.
44. Walling In the Bethlehem Ghetto: Beit Jala Land Seizure.
45. Israel Blow-Up Two Palestinian Houses in Bethlehem District.
46. Barbed wires to Encircle Husan Village.
47. Isolating the Holy City and its citizens.
48. Die Isolierung Bethlehems und seiner Bürger.
49. Al Jalama: a border village totally isolated by the Wall and military checkpoints.
50. Only Proper Disengagement is the Guarantee of Peace.
51. The Segregation Wall to haunt more Palestinian Lands.
52. The Segregation Wall: A skyline in Beit Jala.
53. Husan ... A Palestinian Village Undergoes the Segregation Wall.
54. Israeli Ethnic Cleansing in Rafah..
55. The exercise of house demolition in Imreha village.
56. The nonstop campaign of house demolition in Gaza Strip.
57. Azzun- Atma: A village encircled by the Wall.
58. Reinforcing the Jewish existence in East Jerusalem.
59. Bypass roads are not more innocent than walls.
60. Historic buildings are targeted in Hebron's Old city.
61. The suffocation of all forms of viable life in Al Aqaba village.
62. Land razing and house demolition in Deir El Balah city.
63. Settlements expanding in and around East Jerusalem for the year 2004.
64. Khirebt Tanna: A village threatened by Evacuation and Destruction.
65. The Wall to strangulate Isla village.
66. The Caterpillar Bulldozers in Motion ... Israel Demolishes Two Palestinian Houses in Al-Walaja Village.
67. The Segregation Wall threatens the practice of territorial expansion in Rantis village.
68. The Effects of the Israeli Practices on Residents of Ramin village.
69. People of the caves targeted by the Israeli occupation forces.
70. Israeli Hoax of Barriers removal.
71. New crossing point on lands of As Sawahra As Sharqiya village.
72. The Segregation Wall hits more Palestinian lands in Qalqilyia district.
73. Plans for a new Israeli settlement "South Jerusalem" Grabbing Palestinian lands from Al Walaja, Battir, and Beit Jala
74. A New Confiscation Order for the Segregation Wall in Beit Jala.
75. 9 new Israeli settlements and 65 new outposts in the Palestinian Territories between 2002 and 2004.
76. Land theft continues at the hands of Israeli settlers.
77. The unjustified menace of land strangulation..
78. A new type of Land annexation.
79. Khamameh: another expansion of Jerusalem municipality boundaries..
80. The Israeli attacks against sacred trees continue

81. The Epidemic of Israeli Outposts.
82. 'Anata Village Profile ... " Impact of Israeli Settlement activities ".
83. The Palestinian Village Artas Falls in the Vortex of the Segregation Wall..
84. New Developments on the East & Southeast Terrains of Bethlehem Governorate.
85. Violating international laws ... Disproportionate re-incursion of Palestinian communities in Gaza Strip.
86. Security or Land Grab.
87. Israel Remodels Military Order #03.14.T North of Bethlehem.
88. Beit Sira: A Palestinian Village on the Verge of diminishing.
89. Israeli army's terror and Sabotage actions in Al Yamun town, Jenin District.
90. The remaining lands of Attayba village threatened by the Segregation Wall constructions.
91. Hizma Eclipsed by the Segregation Wall.
92. Land confiscation orders for the purpose of Wall construction in Hebron governorate. August 2004.
93. The Segregation Wall Ravage more lands in Beit Jala.
94. A disregard of Human Rights..
95. The Obstacles to Peace Just Got Bigger.
96. Disconnection between Body and Soul ... The case of Shu'fat.
97. Ar Ram: a Palestinian town facing the threat of the Segregation Wall.
98. A blatant violation of International laws ... The case of Al Qubeibeh.
99. The Segregation Wall: What is it after the Hague Court Ruling?
100. Az Zawiya: A model for non-violent resistance against the construction of the Segregation Wall.
101. A profile of the Israeli violations against people and land in Shufa village.
102. The wall constructions south of Jerusalem and the strangulation of Beit Jala town.
103. Blackmailers of Peace.
104. House Demolition in East Jerusalem during the month of August.
105. Land Confiscation, Tree Burning and Uprooting Campaigns against the Village of Sarta. .
106. Constructing the Segregation Wall are in Deir Samit village - Hebron, September 2004. .
107. Captives of the Israeli Segregation Wall, Western Rural Villages of Bethlehem District.
- 108.
109. Israeli campaign of house demolition, closure and seizure in East Jerusalem during the first seven months of 2004.
110. Israeli " Prayers' Road" built on ruins of ancient Palestinian houses in the old city of Hebron.
111. Israeli Settlements Pollute agricultural lands and underground water in the Village of 'Izbat Salman – Qalqiliya.
112. Apartheid Resurrected !!! Israel seeks Palestinian land without Palestinians.
113. Ecocide in Tequ Town.
114. Israel Continues to Build Illegal Settlements in Occupied Jerusalem.
115. Israel continues to Cram Jewish settlers into Jerusalem.
116. Israeli Proposed Road System in the West Bank: A Road Web from Hell.

117. The Judaization of Hebron's Old City Continues Unabated.
118. What Does Sharon want of Gaza? .
119. Crimes against Humanity in Gaza Strip.
120. Israel Isolates the Northeastern Sector of the West Bank.
121. The Segregation Wall hits lands of Surif and Khibet Ad Deir- Hebron district..
122. As Sikka village falls under Wall plan.
123. Olive picking season has become a nightmare for Faqu'a citizens ... Jenin Governorate..
124. The Segregation wall in Beit 'Awwa town- Hebron governorate.
125. A state of House arrest and the construction of a new settlement prevails in Abu Dis town.
126. Israel Withholds Residency Rights to Palestinians in East Jerusalem.
127. Israel's Olive theft policy is continued from the early days of occupation.
128. Olive Harvest in Palestine !!! Another Season... Another Anguish..
129. New Israeli Segregation Plans in Beit Sahour City.
130. Unveiling the real drive behind the Segregation Plan.
131. A new Confiscation order in lands of Surif and Al Jab'a villages in Hebron Governorate.
132. Palestinian house demolished for settlement expansion in Khirbet Fugeigis - Hebron district
133. The Segregation Wall: Grave impacts and violation of Palestinians' Rights ... "A Live tragedy and endless Suffering ".
134. Restrictions and Humiliations Continue at Illegal Israeli Checkpoints in the West Bank and Gaza Strip.
135. Israeli Occupying Forces Destroy More Palestinian Homes in 'Anata.
136. Hebrew University expansionist plans ... "A flagrant violation of Palestinian rights to Housing and Ownership.
137. Israel Misinforms the World with A New Plan for the Segregation Wall.
138. Illegal Israeli settlement outposts continue to Expand throughout the Occupied West Bank..
139. Israel to challenge High Court decision.
140. The Segregation Wall grabs agricultural lands of Beit Ula town.
141. The new Jerusalem Master Plan grabs 250 dunums of 'Issawiya village lands.

In addition, the following reports were published at POICA:

The Israeli Colonization activities in the Palestinian Territories during the 4th quarter of 2003.

The Israeli Colonization activities in the Palestinian Territories during the 1st quarter of 2004.

The Israeli Colonization activities in the Palestinian Territories during the 2^{ed} quarter of 2004 (April - June).

The Israeli Colonization activities in the Palestinian Territories during the 3^{ed} quarter of 2004, (July - September 2004)

Eyewitness on Israeli activities in the West Bank and Gaza Strip during the period of January-May 24, 2004.

Understanding the decision of the ICJ.

Spot Light: The Wall in Bethlehem Governorate.

