Introduction

In 1967 the West Bank and Gaza came under the military occupation of the state of Israel. Since then, there has been no national governmental authority with an interest in developing the agricultural sector of the occupied territories. Rather, the Israeli military authorities have taken specific measures to constrain Palestinian agriculture:

* More than 50% of the total land area of the West Bank and Gaza has been confiscated.

* 90% of the water resources of the occupied territories are controlled by the Israeli authorities. This has been coupled with a policy of preventing Palestinian farmers from developing their own water resources.

* Military orders have been passed which place crop selection by farmers under the control of the military government.

* Large areas of grazing land have been closed off, and shepherds’ herds have been confiscated.

* Israeli government policy has created
highly unequal competition between Palestinian and Israeli produce. While Israeli produce is subsidised, taxes are levied on agricultural produce from the West Bank and Gaza. In addition, Israeli produce is freely marketed in the West Bank and Gaza, whereas export from the occupied territories to Israel is strictly controlled, and is only possible through an Israeli company. As a result, subsidised Israeli surpluses are frequently unloaded into the Palestinian market, which destabilises prices and harms the Palestinian producer.

* The Israeli authorities have systematically neglected the institutions of agricultural development in the occupied territories. Agricultural research stations have been closed, extension services have been curtailed, and permission to open agricultural colleges has been denied.

Israel's overall policy has been designed to turn the West Bank and Gaza into captive markets for Israeli produce, and to maximise Israeli control over land and water resources. With the agricultural sector being thus neglected and constrained, Palestinian farmers have been compelled to work as manual labourers inside Israel.

It was within this context that the Palestinian Agricultural Relief Committee was formed, with the aim of encouraging the development of Palestinian agriculture in the West Bank and Gaza.
The Origins of the Committee

In 1983 a group of agricultural engineers in Jericho began to conduct extension visits to local peasant farmers, through which technical advice was offered on a regular basis. This initiative was launched in response to the absence of an adequate agricultural extension service. The engineers worked as volunteers, in their free time, and they found that their advice was needed and appreciated by the farming community. Soon new requests for advice came from other areas, new engineers joined the Committee, and their work expanded to include, first, the whole of the Jordan Valley, and then the highland areas, too. By the end of 1984, the Committee had more than 60 members and was working regularly in all parts of the West Bank.

Initially, work was restricted to providing technical advice to individual farmers. As the experience of the Committee grew, however, the limitations of this approach became apparent, and in 1985, a new strategy for the work of the Committee was defined.

The Work of the Committee

The Palestinian Agricultural Relief Committee (P.A.R.C.) is a group of agriculturalists who work, as volunteers, in their free time, to contribute to the development of Palestinian agriculture. The Committee gives priority to the development of that sector which comprises the largest number of farmers, who are
also in most need of assistance, i.e. the small peasant farmers. This sector includes smallholders, tenant farmers and sharecroppers.

The Committee attempts to place its work within the context of an agricultural development strategy for the occupied territories as a whole. This strategy includes technical aspects of production, together with social and economic aspects of agricultural development.

The significance of these broader aspects of agricultural development had become apparent in the 1970s, when a wide range of capital intensive technologies were introduced for high-yield vegetable production. While the technology itself was successfully implemented, with yields increasing dramatically, there was no corresponding development of input, credit or marketing support. As exports are strictly regulated by both Jordan and Israel, the final market for this increased yield was limited. As a result, the increased production led, in bad years, to over-production, a drop in prices, and losses for many farmers. These experiences made clear that a more comprehensive approach to agricultural development was needed, which went beyond simply introducing new technology.

Within this framework P.A.R.C. carries out the following activities:

* agricultural extension
* production of agricultural bulletins
* supply of agricultural inputs
* marketing organisation
* research and development
* emergency relief
Agricultural Extension

Since 1985, more than 1200 extension visits have been made to more than 150 villages in all regions of the West Bank. P.A.R.C. recognises that the problems of small peasant farmers cannot be solved by technical advice alone. In the long run, the Committee encourages the formation of local agricultural committees through which farmers can work together to solve their problems themselves. Collective input purchasing, co-ordinated marketing strategies, crop diversification and agricultural road development are examples of activities which can be managed by such committees. Where these committees exist, P.A.R.C. provides technical support to them when requested.

Where local agricultural committees do not exist, P.A.R.C. visits communities rather than individual farmers, and attempts to encourage the organisation of formal structures for follow-up visits.

Extension visits usually consist of meetings or seminars with groups of farmers, together with field visits, during which specific problems are discussed. Advice is offered over a wide range of subjects, including pest prevention and control, soil management, irrigation management, land reclamation, crop diversification, animal production, product marketing and production for domestic consumption.
Agricultural Bulletins

The Committee's agricultural bulletins are distributed during extension visits and serve as references for the farmers. Publications cover subjects such as olive and grape husbandry, vegetable cultivation techniques, soil and fertiliser management, and protection against the health hazards of agricultural chemicals.

Much of the artificial fertilisers and pesticides used in the West Bank and Gaza are sold with instructions for use in Hebrew only. P.A.R.C. has arranged for the distribution of Arabic translations of these instructions.

Supply of Agricultural Inputs

P.A.R.C. supplies a variety of agricultural inputs to farmers. This service is meant to offer goods at a low cost in order to discourage the exploitation of the farmers by supply agents, while generating a small amount of income for the running of some of the Committee's voluntary activities. The project also creates a useful link with the farming community by offering a service which the farmers need, and providing a mechanism for the introduction of new techniques and technologies.

Agricultural inputs which are supplied by the Committee include vegetable seedlings, tree seedlings, seeds, fertilisers, and pesticides. Agricultural equipment is also available for a notional rent.
P.A.R.C. runs a vegetable nursery which produces more than a million seedlings a year. The project offers low-cost, high-quality seedlings including tomato, aubergine, cauliflower and pepper seedlings. A second nursery supplies tree seedlings, such as almond, citrus, and olive seedlings, and produces about fifty thousand a year.

The Committee also runs an agricultural shop where a wide range of inputs are available to farmers. The shop acts as an important centre where farmers can meet and discuss agricultural matters. Agricultural engineers are present to provide advice when needed. In the future more shops will be opened in different regions of the West Bank.

Marketing

Where appropriate, marketing strategies are encouraged which are meant to maximise benefit for the producers. In co-operation with the Committee, marketing co-operatives have been created; these export directly to regional markets without utilising middle agents. A regional marketing strategy which will require increased regional co-operation of producers is now being developed. Marketing to the EEC countries is also being considered.

P.A.R.C. attaches great importance to the development of a rational marketing strategy through which production would be matched with available markets. It is understood that only such a strategy can help to stabilise the agricultural sector.
Research and Development

P.A.R.C. engages in research projects which provide practically useful information for its extension work. Three main kinds of projects have been carried out:

* agricultural surveys
* field trials
* desk studies.

Agricultural Surveys

Agricultural surveys have been conducted to investigate soil problems in the Jordan Valley, olive tree management, the potential of utilising springs for intensive irrigation, health hazards of agricultural chemicals, and the potential of production for local consumption.

* The soil survey was designed to study the physical and chemical properties of soil throughout the Jordan Valley. More than 1000 soil samples were analysed in the course of the study. On the basis of its results, it was possible to advise farmers on soil management and crop selection.

* The olive survey aimed to identify problems in olive tree management in order to direct the extension programme of the Committee. Main problems identified included tree diseases, the treatment of new varieties of trees, and marketing problems for olive oil.

* The objective of the spring study was to locate springs which could be used for
irrigation. Practical projects were then encouraged to exploit these resources.

* A survey conducted to investigate the health hazards of the use of pesticides consisted of a series of field visits which helped to identify the potentially hazardous ways in which pesticides were being used. This information was incorporated into the Committee's extension programme.

* The most recent field survey dealt with the possibilities for encouraging production for local consumption. The study investigated existing practices and constraints on their development, and included animal production, crop production and food preservation. P.A.R.C. believes that one way to improve the welfare of peasant families is to encourage production for local consumption rather than for cash sale alone. Production for local consumption reduces dependency on the fluctuating agricultural market, and consumption of imported agricultural produce. The Committee is working in a variety of ways to promote the adoption of animal husbandry, crop production, and food preservation for local consumption.

Field Trials
Over a period of two years a series of field trials were conducted which investigated the value of a new kind of nylon mesh tunnel for tomato cultivation. The tunnels prevent disease-carrying insects from reaching the crop and thus dramatically reduce the need for
pesticides. They also provide shade for the crop, which allows cultivation in summer, when temperatures would otherwise be too high. The field trial investigated the yield consequences of various spacing and fertiliser treatment.

A second field trial tested the effectiveness of a particular pesticide for the control of a citrus disease.

In addition to these trials, the Committee uses field plots to demonstrate new varieties and techniques. P.A.R.C. also plans to establish a permanent experimental field station where future field trials can be carried out.

Desk Studies
A series of reviews of local agricultural issues have been produced by the Committee and published locally. Publications have included four articles on the problems facing agriculture in the Jordan Valley, and problems of marketing in the occupied territories. Through these articles P.A.R.C. aims to contribute to the debate on agricultural development in the area.

Professional Development

The Committee provides an opportunity for agriculturalists to upgrade their skills through their work experience as volunteers. Courses and seminars are also held by the Committee in order to continue the professional development of their members.
Co-ordination with Local Institutions

P.A.R.C. encourages co-ordination and co-operation with all institutions which are genuinely interested in the development of Palestinian agriculture in the occupied territories. Active co-operation is enjoyed with a variety of grassroots organisations including voluntary work committees, women's committees and medical committees. Agricultural work camps are organised to help with crop harvesting in co-operation with the voluntary committees. The Committee also co-operates with the universities of Birzeit and Bethlehem and other local academic institutions, and maintains good relations with other local and foreign organisations. During natural agricultural disasters the Committee has helped to co-ordinate relief assistance to farmers in need.

In general, the Committee encourages co-ordination with organisations interested in the agricultural sector. For P.A.R.C., it is only through such co-ordination that rational development plans for the agricultural sector can be implemented.

The Future

P.A.R.C. plans to broaden its work as a popular organisation, with growing participation of volunteer agriculturalists and peasant farmers. Its strategic objective is to promote the formation of local agricultural committees which can organise self-help activities.
The role of P.A.R.C. is to provide agricultural extension support to these committees.

The encouragement of agricultural production for local consumption as well as for cash sale will form an increasingly important component of the Committee's overall strategy.

Professional development and research activities will be continued in order to upgrade the service which P.A.R.C. has been providing to the peasantry.

At the national level, the Committee hopes to contribute to the development of an agricultural policy for the West Bank and Gaza, through research, discussion and co-ordination with local and international organisations.

In these ways the Committee will continue to promote its view of agricultural development, which gives priority to the needs and interests of peasant farmers.