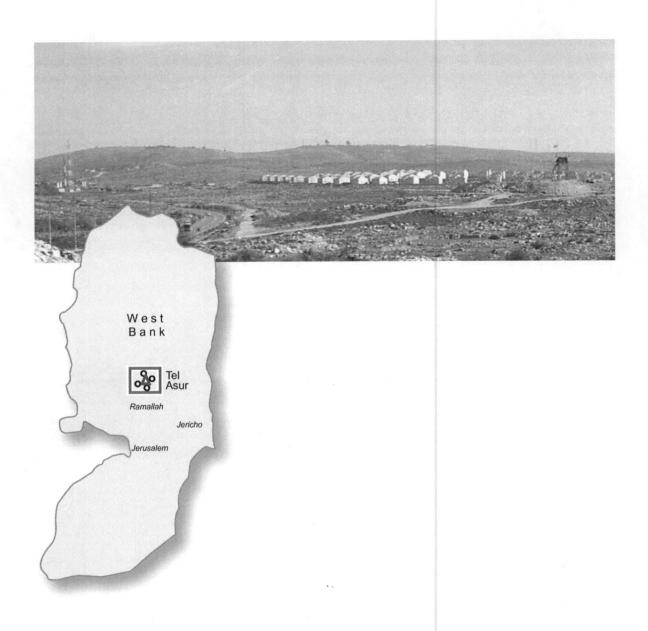
# Effects and Impacts of the Israeli Early Warning Station at Tel Asur



This Report is made up as a so-called Portable File Document. It is the optimal format for documents containing text and detailed graphics. The Maps in this report have been created in the latest version of a purpose Graphical Program and must be viewed in the most up to date Version of Adobe Acrobat Reader Version 6. It can be downloaded for free at: www.adobe.com

# Effects and Impacts of the Tel Asur Early Warning Station

#### Introduction

This Report assesses to what extend a particular Israeli military facility, a so-called Early Warning Station (monitoring potentially hostile foreign deployment of armed forces), may be negatively affecting vital Palestinian interests. This concerns interests on a broader national scale, but in particular interests on the scale of localities situated immediately around the station.

The station in question is that of Tel Asur (hebraized as: Ba'al Hatzor), 10 km to the Northeast of Ramallah.

Several principal questions arise:

1-Does the Station and the way it is operated interfere with villager's daily lives in a restrictive sense? Does it impede long term developmental interests? If so, to what extend can adverse impacts be minimized, mitigated or avoided alltogether?

2- What is the scope for reconciling the interests served by the station with those of the eventually affected local Palestinian communities? Could financial disbursements offset

eventually affected local Palestinian communities? Could financial disbursements offset or compensate for assessed negative impacts, or for long term structural damages or disabled developmental opportunities?

3-Is it possible to consider an alternative location for the station that does not substantially reduce its targetted functionality?

The scope of this impact assessment is limited to that of an elementary, provisional appraisal, largely on account of the substantial restrictions posed by the scarcity of available data and information. Just a bare minimum of publicly available statistical information <sup>1</sup> on the socioeconomic characteristics of the Palestinian localities around the station could be reviewed for the investigation, coupled to standardly available terrain information in the form of officially issued topographic maps<sup>2</sup>.

Two vital sources of data and information were used additionally. One relating to the first mentioned sphere of sources and assets of Palestinian livelihoods. It comprises the broader context of long term developmental prospects and targets as identified by the Palestinian Ministry of Planning <sup>3</sup> widening and deepening the framework of the concerned localities to that of a whole region (Ramallah) and that of the whole West Bank.

The other source is a set of satellite images (Aster, 2001) together with three older aereal photographs (1997) to provide a proper detailed profile to the topographic documentation in terms of land use features.

The principal perspective chosen for the impact assessment is socio economic and developmental in character in a temporal setting that takes account of current and future conditions and prospects.

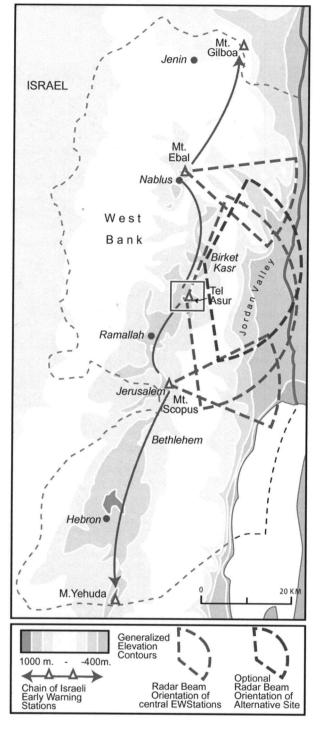
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<sup>&</sup>lt;sup>1</sup> Palestinian Central Buro of Statistics, Census Locality Data, 1997

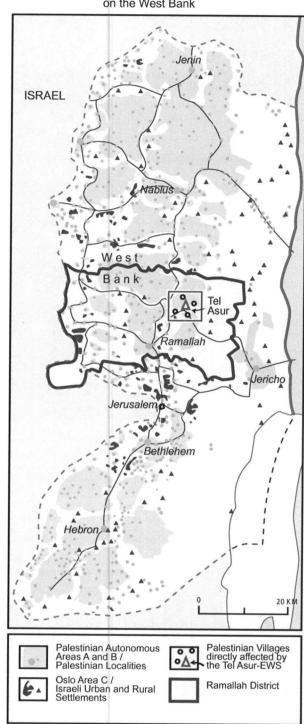
<sup>&</sup>lt;sup>2</sup> Survey of Israel ,2001

<sup>&</sup>lt;sup>3</sup> The Regional Plan for the West Bank Governorates, MOPIC, 1998

Map 1 - Tel Asur in the chain of other Israeli Early Warning Stations on the West Bank



Map 2 - Tel Asur amidst Palestinian Localities on the West Bank



4 villages

Map 1 - Tel Asur in the chain of other Israeli Early Warning Stations on the West Bank

The first map at left pictures the positional and physical aspects of the Israeli Early Warning Station at the summit of Tel Asur on the West Bank. Against the backdrop of the West Bank's central hillrange, the Station's crucial characteristics in terms of centrality, height and eastward orientation can be grasped rightaway.

The Station is shown as the centerpiece in a whole chain of similar stations, with the one at Mount Ebal to the North and the one at Mount Scopus to the

South as closest supporting units.

Most likely the Tel Asur Station is equipped to monitor deployment of potentially hostile forces (to Israel) all across the Jordan Valley at both sides of the river. The stations at Ebal and Scopus are positioned to do this for the approach routes toward Nablus and Jerusalem.

The map also shows the site of Birket Kasr, which has all the essential attributes that could make it a full or close alternative to the Station at Tel Asur.

#### Map 2 - Tel Asur amidst Palestinian localities on the West Bank

The second map at right shows the position of the Tel Asur Station against the backdrop of Palestinian populated areas, and their jurisdictional status resulting from the Oslo Accords (Oslo Areas A and B combined). The next item on the map comprises the Israeli settlements in the Oslo C-Area, under full Israeli control and administration.

The map highlights the Oslo-induced fragmentation of the Palestinian territories

Preserve of EWS is affecting a total of 4 villages - potential growth

The Report's first part opens with a brief sketch of the Early Warning Station as the *impacting agent*, elaborating key aspects of its operational modes and functionality. This is followed by a characterization of the Palestinian localities directly *being impacted* upon, described within a regional and national geographical context. The second part begins in briefly identifying selected key Palestinian spheres of interests, such as housing and making a living, which are to be balanced by the need to protect or upkeep other interests, such as precious natural resources, for instance scenic landscape, and cultural heritage. The station's impacts will be assessed for each of the selected interest-indicators.

# The impactor: the Tel Asur / Ba'al Hatzor Early Warning Station

The Early Warning Station investigated in this report is established by Israel on the summit of Tel Asur (named Ba'al Hatzor by Israel), which with an elevation of 1020 meters is the highest in the West Bank (See Map 1). This location has three distinctive characteristics that must have prompted the station's construction at this site. The aforementioned highest elevation in the West Bank, its central position almost exactly in the middle of the West Bank and the fact that it overlooks the central portion of the Palestinian hillcrest's eastern slopes, descending into the Jordan Valley, a possible staging area for the deployment of foreign armed forces hostile to Israel. The station must be seen as a component of a whole system of other such facilities positioned along whole length of the Palestinian hillcrest from North to South. Relating to its West Bank part, the first top most station is that of Ma'ale Gilboa (elevation: 500m. located close to the village of Faggua in Jenin District). Next in line is the station at Mount Ebal (950m.) above Nablus, followed by Tel Asur/Ba'al Hatzor (as the most central one at 1020m). There is another station on the hill-promontory of Mt. Scopus (780m) in East Jerusalem with a last station being planned at the West Bank's southern extremity, adjacent to the settlement of Metzadot Yehuda (908m), 10 km south of the Palestinian town of Sammu'.

The distance from the Gilboa station to Ebal –as the bird flies- is 32 km, and from there to Tel Asur about 28 km, with a next stretch of 20 km to Mount Scopus and another 50 km to Metzadot Yehuda, alltogether a functional chain stretching along 130 km. Crucial factors determining a station's effectivity are: elevation, line of sight, and probably the linkage position within the total chain of stations.

One important question arises at this point: How crucial is the factor of height and position within the chain's alignment on the whole? Could alternative sites attain a level of functionality not reducing what is required for the total chain beyond a required bottom level?

In other words: is it possible to find another location with more or less similar terrain characteristics as Tel Asur?

The question is important because the Tel Asur/Ba'al Hatzor Early Warning Station lies amidst a cluster of Palestinian villages, liable to experience adverse effects from the station.

The question will again be adressed after assessing effects and impacts. At this point it suffices to note that at least one alternative location may well fall within the range of required functionality of the whole chain of stations while not in the way and in the environment of nearby residential localities.

The Tel Asur Station comprises two separate complexes of buildings and installations at either side of the road between Deir Jarr and Kufr Malik. One of the two occupies an

area of 250 dunam, located on Tel Asur's real summit, dominated by two sizeable radar-domes. The other complex on Tel Asur's lower eastern slope measuring 125 dunam is equipped with an assembly of linear antenna's, one of which is rising to a considerable height.

Both complexes are connected eastward to the Allon Road No. 80 (see: maps 2 and 3) by means of a special access road which is usually open to Palestinian traffic. Both complexes are enclosed within a special zone taking up 2.7 sq.km. of degraded field crop land, which itself is close to 950 dunam (see map 5).

The Station's operational mode does not appear to obstruct or hinder the pursuit of daily lives by the inhabitants of the Palestinian villages around the station. The Station's special zone can be traversed by villagers, but cannot be used.

There is no doubt that the station occasioned the local configuration of Oslo-induced areas of Palestinian autonomous self-rule, which has split the cluster of Palestinian villages around the station in two different parts, right at the very gravitational center where these villages coalesce, at the point now taken up by the station's special zone. The territorial split-up on account of the station, is just a part of similar patterns of territorial fragmentation brought about by the Oslo Interim Agreement. In the case of these villages it results in the Station's special zone being connected with one wide road corridor eastward to the so-called Allon Road (Road No 80) alongside the foothills of the Jordan Valley, and another such road corridor westward, linking up to Highway 60 at Ofra Settlement. Both these North-South connecting highways are vital strategic transportation arteries, in particular Highway 60, west of the station, which is the traditional central Palestinian trunk road connecting Jenin in the North via Nablus, Ramallah, Jerusalem and Bethlehem to below Hebron in the South (see: maps 3 and 4) The exclusive Israeli control over these roads means that the concerned Palestinian villages are without unhindered access to- and control of them, and remain as territorial 'islands' in between the roads, enabling just a residual form of limited urban and rural development. In sofar as the station functions as one of Israel's 'anchors' to shape this area-configuration, it makes a decisive contribution to the marginalization of the villages in question.

Abolishing the Station's special zone and its western and eastern Israeli controlled road corridors would restore the village cluster's cohesion, open up the geographic center in between them and provide crucial residential and commercial space which is urgently needed.

#### The impacted upon Palestinian villages

#### **General Situation**

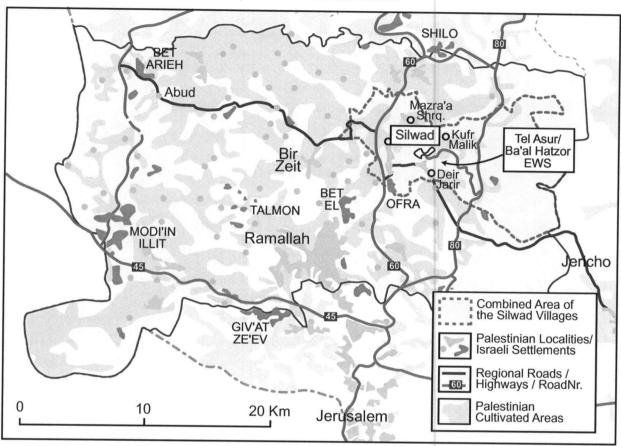
The Early Warning Station is situated in the Palestinian West Bank district of Ramallah, 12 km Northeast of the City, on the summit of Tel Asur, the slopes of which are taken up by a cluster of four Palestinian localities. The most important of them is Silwad, which is growing into a township, the three others are large to medium sized villages, around Tel Asur, the first one Mazra'a Sharqiya (North), the second one Kufr Malik (East) and the third one Deir Jarir(South), on the traditional lateral road linking Ramallah to Jericho.

The four villages are part of a larger group of Palestinian localities, which is the Ramallah District's Eastern section (see: map 3).

The Silwad villages around the station are centrally positioned in this group. To the North is a small cluster of villages centered at Sinjil, to the South is a cluster of villages

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Map 3 - The Ramallah District



#### Map 3 - The Ramallah District

Map 3 zooms in on the Ramallah District as the relevant regional framework for assessing the impacts of the Tel Asur Early warning Station. The map pictures the Districts rural and urban resources and assets, including the most vital roadlinks.

The Tel Asur Station and the Palestinian villages around it, centered at Silwad, are situated in the District's sparsely populated Eastern margins, with more than three quarters of the District's population and cultivation West of them.

While the map reveals the relative scarcity of productive cultivated land areas available to the Silwad villages, it also shows their highly advantageous position at one of the West Bank's central crossroads (Highway 60 and the Abud-Jericho Road).

It brings the cities of Ramallah, Jerusalem, Jericho and Nablus within quick and easy reach of Silwad ( each destination less than half an hour's drive in normal circumstances). This gives Silwad excellent opportunities to develop as one of the West Bank's most vital urban growth poles. Urban growth poles are crucially important for developing economies such as the Palestinian. On the one hand to deliver goods and services to remote rural areas, strongly reducing costs compared to when the basics of such a package can only be obtained in the city of Ramallah, which is the case till today. On the other hand in revitalizing the productive basis of such areas, offering incentives to facilitate, intensify and upgrade economic diversification for the whole District.

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centered at Beitin (adjacent to the Ramallah DCO) in between Ein Yabrud and Deir Dibwan, the three practically functioning as suburbs of Ramallah. The four Silwad villages together have around 17.000 inhabitants out of 45.000 in the Ramallah District's eastern Part, the whole district itself having a quarter of a million Palestinian inhabitants, with around 90.000 of them concentrated in the urban agglomeration of Ramallah, which includes Al Bireh and Beituniya.

Silwad and its adjacent villages are very favourably positioned in the West Bank on the whole. Highway 60, rerouted by Israel along Silwad, offers a first-class connection to Nablus and Jenin in the North and to Ramallah, Jerusalem and Hebron in the South. Silwad is also at the crossroads of the lateral regional road eastward to Jericho and westward to Bir Zeit, Abud and Ni'lin. It can fairly be considered as the second. transportation hub after Ramallah in the district.

Such a geographic position offers above average opportunities for urban and rural development. The Silwad villages are also favorably endowed in terms of natural assets and land resources (see: map 5).

Each village is surrounded by extensive olive groves spread out over the slopes of Tel Asur and adjacent hilltops. Ridge plateaus and upper valleys in between have smaller fertile strips of well watered cropland where vegetables are grown. One of the villages, Kufr Malik cultivates a valley which is irrigated by one of the richest Palestinian groundwater wells.

It is one of the few high inland locations where irrigated cultivation produces rich harvests of cash crops, generating substantial income and employment. Another sector generates even more, which is that of stone quarrying and -cutting. In two of the villages, Mazra'a and Kufr Malik it is perhaps the most dominating economic activity, in which dozens of enterprises provide employment to a considerable number of local workers. The sector by itself is however a questionable blessing, because it causes extensive destruction of the villages natural habitat, caused by the excavation of rocky layers next to olive groves and cropland, which are often dusted over with microparticles, which can create hazardeous health conditions.

# Socio economic conditions and prospects

A number of sources suggest that local employment is only available for less than 10% of the village labor force, with around 50-60% finding work in Ramallah and until recently in Israel.

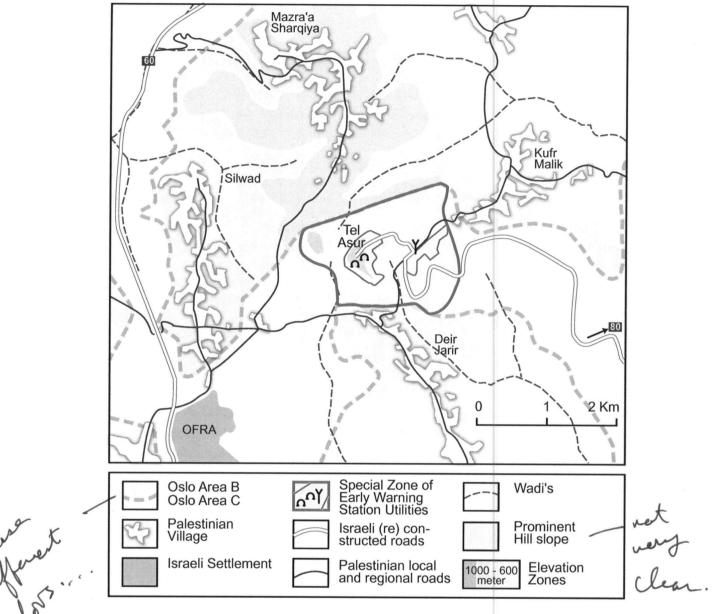
Unemployment ,usually hovering around 30% may have risen sharply because the latter labor market is practically closed for village workers since the year 2000. The same sources allude to the high dependancy in all the villages on external sources of income, such as remittances from abroad.

Income figures of the villages appear comparatively favorable at first sight. The World Bank Report on the poverty situation in the West Bank and Gaza (May 2001) lists core regions, such as Jerusalem and Ramallah as the least poor (3%-10% under the poverty line). This in stark contrast to peripheral regions, such as Jenin and Hebron where 17-45% of the population can be classified as poor.

These figures suggest that the West Bank's core area, in between Nablus and Bethlehem and centered at Jerusalem –including the Silwad villages- has distinctively moved away from traditional rural sources of limited income, however with increasing dependency on foreign remittances.

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Map 4 - Tel Asur and the Silwad Villages; Situation



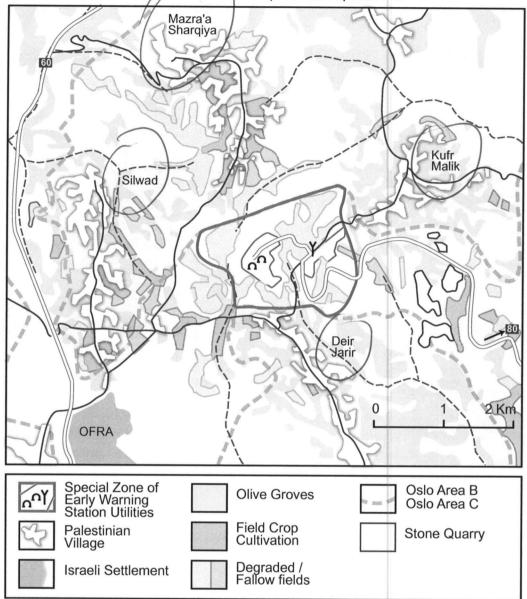
Map 4 - Tel Asur and the Silwad Villages; Situation

This map is the first in a sequence of four picturing the local situation of the four Silwad villages around the Tel Asur Station and the extend to which they are affected by it. Map 4 depicts some essential local attributes of the villages and the station. The first element to distinguish is the division into Oslo determined Areas B (partial Palestinian autonomy) and Area C (full Israeli administration and control). The latter is the domain of Israeli Settlements, such as Ofra, and of military installations, such as the Tel Asur Early Warning Station, together with the roads linking them to other areas controlled-, or administered by-, or being a part of Israel. The map's central feature is the summit of Tel Asur taken up by the Early Warning Station, dominating and affecting the Palestinian villages around it on the summit's lower slopes. The pictured elevation zones, ranging from about 600m. high at the map's margins, ascending to over 1000 m. at Tel Asur itself, give indication of the station's physical domination of the local scene.

The other modes of domination stem from the Oslo-induced territorial-jurisdictional division. Villages can only develop away from the designated C-Areas, are without unhindered roadlinks to one another and cannot freely access highway 60 leading to Ramallah, the District's Capital, or other cities such as Nablus and Jerusalem.

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Map 5 - Tel Asur and the Silwad Villages; Resources and Developmental Imperatives



Map 5 - Tel Asur and the Silwad Villages; Resources and Developmental imperatives

Map 5 pictures the vital resources at the disposal of the Silwad villages. It shows how all villages are surrounded by olive groves and field crop parcels, most of the latter being degraded or laying fallow. Today these landresources only make a limited contribution to the livelihoods of villagers. most of them being dependent on labour in Ramallah or on remittances from abroad. Featuring prominently on the map is the collection of stone quarries below Kufr Malik, encroaching upon adjacent productive cultivations and negatively affecting local scenery. Three vital developmental imperatives can be distinguished for the pictured Palestinian localities. The first concerns the required additional village housing on account of natural population growth. The second concerns the need to make optimal use of local natural resources in balance with the need to protect landscape values and local cultural heritage. It prompts villages to expand not on their precious and scarce greenery, but preferably on nearby vacant rocky land, which is amply available. In accordance with Palestinian National Plan objectives it is also important to regenerate potentially productive fieldcrop land, wherever feasible. This goes hand in hand with utilizing the water harvesting capacity of the Tel Asur slopes. One last local developmental objective is to open up the vacant land south of Silwad to realize

its potential as an urban growth pole.

Despite above average conditions and above average favorable locations the Silwad villages are faced with the same internal structural drawbacks as the rest of the Palestinian territories.

One is demographic in nature. The combination of high birth- and fertility rates with a low mortality rate will double the Palestinian population within the next 20 years. The Silwad villages will also experience such a natural increase. The burden of this increase is compounded by the extremely low Palestinian labor participation which is around 20% compared to above 40% in the Western world. On top of that salaries are generally modest to low. There is little employment in higher skilled sectors, which is lacking in substantial growth. Every year the Palestinian labor force grows with about 5%, which outpaces the creation of new jobs.

The scope for adressing these drawbacks through developmental policies by public agencies or governmental institutions is extremely limited on account of the restricted extend of Palestinian sovereignty on the ground. The Oslo-arranged territorial fragmentation of the West Bank and Gaza on the whole, and on the level of separate districts, leaves little else than disconnected pockets of residual local Palestinian control.

Developmental policies, in which the national, regional and local levels are mutually adressed cannot be effectuated.

Most of the critical and fundamental factors and incentives to stimulate economic growth of, for instance the Silwad villages, are beyond Palestinian grasp. The developmental imperatives for the villages are obvious. Road connections to the ouside world need to be opened up, smooth access for commuters to jobs in the City needs to be assured. Substantial new residential and commercial space needs to be made available. Local employment needs to be stimulated and, to a reaslistic degree, also be ventured in the sector of modern irrigated agriculture, for which opportunities are apparent.

A balance must be found with the need to protect precious natural resources, such as vital sensitive areas for water winning and areas of outstanding natural beauty.

Assessing the impacts of the Tel Asur/Ba'al Hatzor Early Warning Station can be done best in taking reference to the developmental targets indicated above.

These have been identified in <u>Palestinian National Development Plans</u>, formulated most clearly on a national and regional level. There is as yet little to link that to the level of separate localities. Plans for localities such as the Silwad villages are usually very limited in scope, taking little to no reference to the objectives set out in national or regional development plans.

Usually local <u>Town Planning Schemes just</u> regulate residential growth, reserving some land for institutes and commerce, but as a rule just within the confines of the Osloselfrule perimeters. These imposed perimeters are exacting a toll which is seldom recognized. It forces villagers to build within precious green areas, instead of on much more suitable vacant rocky land beyond the Oslo-perimeters.

Despite the absence of local development schemes informed by regional and national plans the assessment of impacts from the Tell Asur Early Warning Station in this Report will exploratively refer to the broader development targets as far as these can be localized for the Silwad villages.

This Report has selected the most crucial socio-economic issue-indicators for the villages and transposed these from a national and a regional scale to that of localities.

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The primary issue being reviewed is that of <u>village residence</u>, including commercial and industrial development. The other issue concerns the sector of <u>modern irrigated</u> <u>agriculture</u>. Relevant constraint factors, such as the protection of natural resources, will be adressed within each of the reviewed issues.



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# 1-Village Housing

Over the past decades the Silwad villages have expanded and spread out from tiny compact dwelling compounds on high ridges descending and spreading along pathways toward the road leading to Ramallah, producing ribbon patterned built-up areas, interspersed with olive groves and crop fields.

In that process building density (houses per dunam) decreased substantially from about 6 houses per dunam (1000 sq.meters) to around I.3 houses per dunam or lower. The investigation for this report involved measuring the building density of Deir Jarir, one of the typical villages in the cluster of Silwad. It revealed the presence of –in rounded off numbers- close to 300 housing units within a built-up perimeter of 360 dunam, accomodating 3000 inhabitants in 1998, a figure expected to have grown to 3.600 inhabitants today.

Taking this as a typical example, the housing stock that is needed in the near future by about 2020 can then be roughly projected through a set of standard formulae, that take account of the expected increase in households. Disregarding the factor of outmigration to a city like, for instance Ramallah, the increase of households, with each one requiring one unit of residence, can be conservatively estimated at 600 in the village of Deir Jarir, which on average presupposes doubling the current households and housing units.

Without a concerted effort by the local authorities to control building, these additional housing units are likely to sprawl along the access roads to villages —hindering the smooth flow of traffic- and growing into precious olive groves and cropland, seriously depleting village greenery while exacerbating conditions of overcrowding.

Avoiding such a scenario implies the need to reserve suitable vacant land group for a

Avoiding such a scenario implies the need to reserve suitable vacant land areas for a new neighborhood oriented form of housing, decreasing the costs for constructing sewage- and road infrastructure.

All the villages have suitable vacant land reserves for this purpose (see: map 6). But only one of the villages, Mazra'a Sharqiya can get fully hold of it. The other three villages cannot because their suitable land reserves are partly or completely in Israeli controlled C-Zones.

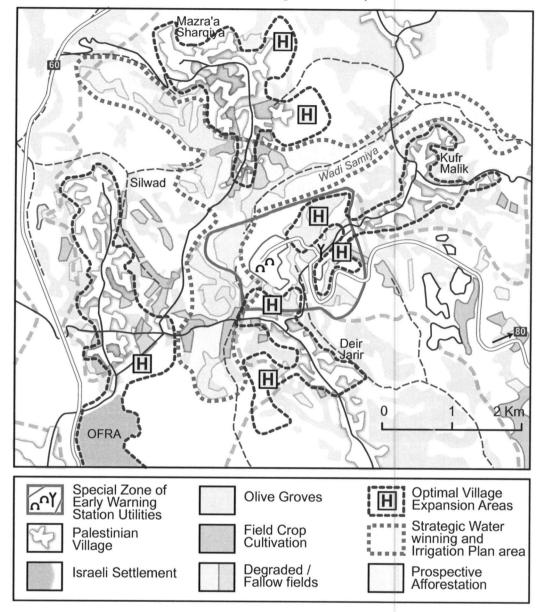
For two of the villages, Deir Jarir and Kufr Malik these zones also overlap with the special zone around the Early Warning Station.

The other community, Silwad suffers from the same denied land use, not on account of the Early Warning Station, but on account of the Israeli Settlement of Ofra. This rapidly expanding settlement controls a C-Zone, which is Silwad's only suitable area for additional housing and commerce, both of which are targetted for this town in the Palestinian National Development Plan.

The incurred losses on account of denied use of these areas are very substantial (see: map 7).

It is beyond the purpose of this report to make more than just an elementary estimated dimensional cost assessment. But just a rough conservative estimate is adequate to understand its basic dimensions. Each of Deir Jarir and Kufr Malik's prospective new residential areas measures 800 dunams. Applying a standard medium built-up density

Map 6 - Tel Asur and the Silwad Villages; Developmental Land Claims



Map 6 - Tel Asur and the Silwad Villages; Developmental Land Claims

This map builds on the previous one in visualizing how and where the outlined developmental imperatives can be implemented best, based on a conglomerate of criteria. The interrupted red lines with Capital Letters H show the areas of vacant land most suitable for additional housing. The interrupted blue line shows the local Strategic Water winning and Irrigation Plan conceptualized by PECDAR.

The Northwestern slopes of Tel Asur are highly suitable for afforestation, which would stabilize rain water retention capacities, check erosion and enhance the area's visual and recreational aspect.

of 3 housing units per dunam, there would be ample space for generations to come. The problem is that Kufr Malik's suitable residential land reserves are entirely within the station's special zone, those of Deir Jarir are for two-thirds in it. Depriving both communities of these areas is costly on two accounts. The estimated total housing need of both villages till 2020 comprises up to 1000 units. Building these within the current village perimeters in gardens and olive groves multiplies the foundation costs (land price) with an estimated factor of two to three (building on rocky vacant land is least costly) which per housing unit could increase total costs with 20-30%. An additional cost factor can be attributed to the loss of commercial turnover in main street shopping establishments, adjacent to the suitable residential land reserves. This is an even more prominent issue for Silwad which is targetted in the Palestinian National Development Plan as a regional urban growth pole, providing extra residential, commercial and institutional space to serve secondary villages like Mazra'a, Kufr Malik and Deir Jarir.

Another cost factor cannot be expressed numerically but is nonetheless very tangible. It is the environmental deprivation brought about by the enforced building in village greenery, which also has sad consequences for the declining landscape quality in and around the villages.

### 2-Modern Irrigated Agriculture

The Palestinian Economic Council For Development and Reconstruction (PECDAR) released the result of a Strategic Water Study in the year 2001<sup>4</sup>, which is of utmost relevance for the rural developmental targets of the Silwad villages and how these are prejudiced on account of the Tell Asur Early warning Station.

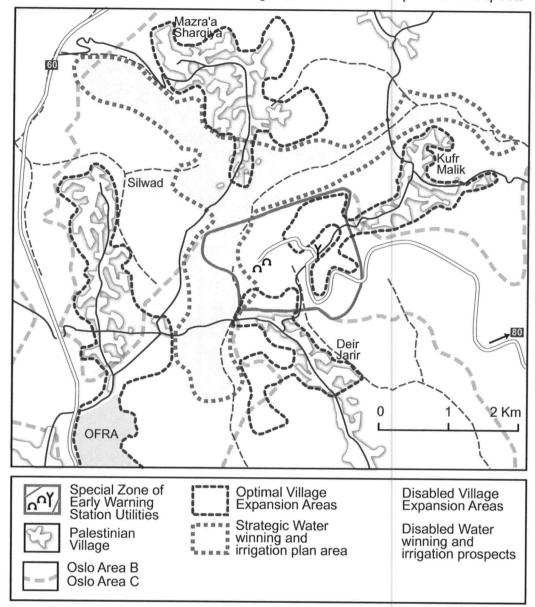
The Pecdar- study explains the huge advantage of recycling purified waste water ,for instance from cities and villages to be used in irrigating degraded and delapidated croplands, hitherto only relying on rainfall which is seasonal and highly irregular in Palestine. A steady supply of re-useable water would give a new prospect of viability to cultivate these perforce neglected fields. More water could be obtained in constructing simple dams to catch considerable amounts of so-called 'storm' run-off water, providing storage for dryer seasons. The overall objective is to maximally repair the rapidly declining indigeneous Palestinian food security, while cutting spending on foreign food imports (most of it from Israel). An important secondary objective is to reduce soil degradation and expand the Palestinian water winning capacity, which is one of the most pressing needs in light of the required economic growth in the Palestinian territories.

The Pecdar-study has pinpointed a number of prospective strategic inland irrigation areas, one of which is the upper valley system of Wadi Samiya, descending from Silwad, Mazra'a and Kufr Malik toward Al Auja and the Jordan River.

Developing this strategic irrigation area (see: map 6), around the summit of Tel Asur would add 1600 dunam of high potential cultivation to the currently medium productive reserve of agricultural village land. It would also substantially diversify the basket of village field produce, which is sure to find high demand in the nearby agglomeration of Ramallah. A glimpse of the promising prospects of such a scheme can be obtained in the lower section of the same wadi below Kufr Malik, where abundant groundwater

<sup>&</sup>lt;sup>4</sup> Palestinian Water Strategic Planning Study, PECDAR, 2001

Map 7 - Tel Asur and the Silwad Villages; Disabled Developmental Prospects



Map 7 - Tel Asur and the Silwad Villages; Disabled developmental prospects

The last map in this sequence pictures to what extend the sketched developmental imperatives for the Palestinian villages are disabled by the Tel Asur Early Warning Station.

All additionally required housing capacities on suitable land for Kufr Malik are beyond reach within the Station's special zone. The village of Deir Jarir likewise finds most of its suitable additional residential land reserve within the special zone. Only Mazra a Sharqiya has no such limitations. Although not directly related to the Station, the map shows how the targetted urbanization of Silwad is predominantly blocked by the settlement of Ofra. The next vital prospect disabled by the Station is the option to implement most of the local Strategic Water winning and irrigation Plan. One section in between Silwad and Deir Jarir is located in Area C, leaving around two-thirds of the Plan area within Palestinian Autonomous Area B. However most of the storm run-off water required for that section must be harvested on the upper slopes of Tel Asur, located within the Station's special zone.

pumped from a number of adjacent wells propels a thriving, commercially viable cultivation.

It's better part comprises some 400 dunam of irrigated fieldplots, which in a favorable year can generate a turnover value of \$400 000 giving seasonal employment to some 80 local workers, earning about \$20 per day. The net accrued value of the larger Strategic Irrigation Scheme when implemented, above wages and production costs, discounting implementation investments- could amount to an annual \$ 0.75 mln.

The question is to what extend the station is standing in the way of this irrigation scheme.

The Station's special zone completely covers the Tel Asur summit, which is the scheme's crucial area for catching rain storm water( see: map7). Half of the scheme's agricultural capacity depends on this source, the other half on recycled waste water. Without Palestinian access to- and control of Tel Asur's catchment area, some 800 dunam of the scheme cannot be brought to the potential optimal level of agricultural output. It would also deprive the locally targetted Palestinian fresh water harvesting capacity of 0.345 million cubic meters, which is substantial, especially in a drier and higher inland area, such as the Silwad village cluster. And last but not least it would deprive the villages of potential additional local employment, capable to double its current figure.

# Summed-up Impacts:

The Tel Asur Early Warning Station deprives the Silwad villages of:

1- Alltogether 1100 dunam of optimally suitable new residential areas, of which about 40% is urgently needed to accommodate the anticipated natural demographic growth of two of the Silwad villages.

2- 460 dunam of degraded field crop land optimally suitable for afforestation (on the western slopes of Tel Asur).

3- 800 dunam of irrigable cultivation projected in Pecdar's Strategic Water Scheme.

4- Generated agricultural productive value targetted by the Strategic Water Scheme for its disabled section amounting to at least 0.6 mln \$ per year, including local employment opportunities for some 140-150 seasonal workers, earning around half the Israeli standard minimum wage per year.

5- 0.345 mcm (million cubic meters) of annually harvestable fresh water on account

of the same plan.

Other related or derived impacts cannot be easily projectively quantified, but are nonetheless important.

One likely first effect is that the Station's dominating presence impedes Silwad's attractivity for investments in its urban prospects. As long as security-related Israeli traffic and deployment continues along Silwad's outskirts, not even a beginning can be made to develop the village into the targetted urban growth pole. It explains why most dependent adjacent villages are still out of necessity bypassing Silwad for Ramallah. For the same reason few visitors from that city can be expected in Silwad, for instance to enjoy its recreational assets.

The summit of Tel Asur has definite potential as an open-air recreational area, if properly developed, for instance by afforestation, which would however necessitate

curtailing the nearby open-air quarrying. Tel Asur could become a crucial recreational asset in conjunction with another high potential tourist site, 5 km. eastward at Khirbet Samiya, a location with an ancient roman watermill and picturesque caves. The Strategic Water Scheme could be used to develop this site additionally as a water recreational tourist centre. The potential for attracting visitors to the Silwad villages could be further enhanced in protecting and restoring the vernacular traditional architecture of Kufr Malik and Silwad's village cores.

..The Scope for mitigating or compensating for the Station's negative impacts

After assessing the early Warning Station's principal impacts the scope for mitigating or compensating for them must be explored.

Mitigating impacts could be envisaged in reducing the Station's operational area to just the main radar complex itself on the very summit of Tel Asur. This could ensue, for instance in relocating the secondary station complex to merge with the main one, which could then open up the remainder of the special zone and other nearby C-Areas currently excluded from Palestinian use. This could be amplified in relocating the current territorial corridor between the then compacted Tel Asur Station and Ofrasettlement away from the road linking the Palestinian villages.

After such a re-configuration most of the assessed negative impacts would be drastically reduced. The two most affected Palestinian villages, Kufr Malik and Deir Jarir could realize their projected residential needs on suitable lands, while the local Strategic Irrigation Scheme could be fully implemented.

The crucial question with this option is whether Palestinian intensive use, such as residence, can be reconciled with the Station's functionality at close quarters. A similar situation exists elsewhere in East Jerusalem at Mount Scopus with an Israeli radar station just a couple of hundred meters away and above the locality/neighborhood of 'Isawiya. Apart from being subjected to certain building restrictions, there appears some room for reconciling the different functionalities from a Radar Station viewpoint. This is however entirely different from a Palestinian urban viewpoint. Then there is much less, if any room to reconcile residence with an adjacent environmentally spoiling Radar Station.

The question whether assessed projected losses on account of the station can be compensated touches upon two aspects. One is locational, the other is financial. The first aspect relates to the possibility to relocate functionalities elsewhere. The second aspect relates to options and dimensions of financial recompensation for projected losses.

It is beyond the scope of this Report to explore the latter. Except in pointing out that such projected losses, on account of the deprived direct uses outlined in Points 1-5 and of subsequent secondary prospects are substantial, amounting to millions of dollars. States usually negotiate a treaty of lease with other states for extra-territorial use of a military facility, in which financial recompensation may be arranged. An example is the permanent treaty of 1903 giving the USA extra-territorial rights over Guantanamo on the island of Cuba in return for an annual rent.

The prospect of Israeli lease of the Station in its current set-up is undesirable due to its substantial negative impacts upon the Silwad villages and the pivotal position of those localities in Palestinian national and regional development schemes.

Compensating chosen or necessary disabled functionalities by relocating them elsewhere has both a Palestinian and an Israeli aspect.

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Relocating the projected housing zones of Kufr Malik and Deir Jarir to other areas would incur, as indicated above, a substantial environmental and financial price. The Palestinian Strategic Water and Irrigation Scheme cannot be realized elsewhere on account of topographical constraint factors.

What about relocating the Early Warning Station? This question becomes all the more urgent in consideration of all other options of mitigation or Palestrinian locational compensation being extremely costly.

# Prospects for Relocation of the Tel Asur Early Warning Station

Until recently the Tel Asur Early Warning Station together with the nearby settlements of Ofra and Bet El could be regarded as key strategic sites that Israel would not be willing to evacuate under any circumstance. Both settlements have a veteran status, are relatively sizeable —only a dozen settlements are larger—with the Tel Asur Station as a vital component in Israel's defence infrastructure.

But since March 2003 evidence has emerged hinting at a fundamental re-appraisal of the geopolitical and stategic importance of those settlement-sites within the Israeli Army establishment. The recommendations submitted by the Israeli Army Planning Buro for an Eastern so-called Security fence along the Jordan Valley are leaving Bet El, Ofra and the Tel Asur Station West of the fence, at the 'Palestinian' side.

Aside from geopolitical considerations, it could indicate a perceptional change within the Israeli Army in which remote satellite- and mobile drone-monitoring are considered more suitable tools than fixed large ground installations such as the Tel Asur Station, which are much more vulnerable to attack or to jamming interference.

The factor of height for faraway-monitoring would then be less vital ,compared to short range monitoring from advantageous, eventually lower and smaller sites close to key approach routes, such as the Far'a valley on the way to Nablus, or the Adumim ascent to Jerusalem.

In other words: the Israeli Army may already be reconciled to the prospect of evacuating the Tel Asur Early Warning Station. Which is not to say that other prominent Israeli pressure groups are of the same mindset.

It is nevertheless useful to explore the possibilities for relocating the Station to another site with the closest possible similarity to the relevant attributes of Tel Asur. One site situated on a promontory adjacent to Birket Kasr, 3 km. southeast of the Palestinian village of Qusra (District of Nablus) has such attributes. It has a respectable height of 844 meters and is only 10 km away from Tel Asur,in other words: hardly less centrally positioned.

Probably for that reason it is taken in by the projected Jordan Valley fence, at the 'Israeli' side.

#### Conclusion

The Tel Asur Early Warning Station prejudices vital long term developmental opportunities of the Silwad villages, the deprivation of which leaves few if any prospects for mitigation or compensation to the Palestinian villages.

Relocation of the Station is the most practical and least costly option if Early Warning Capabilities need to be maintained. It is most likely envisaged by Israel, not in order to avoid the assessed impacts, but in reconsideration of vital geopolitical and strategic interests.

Prospects for evacuation and relocation of the station are probable –within a year or two- if and when the projected Eastern Jordan Valley Fence will be completed.

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This will bring relief for two of the most affected villages (Kufr Malik and Deir Jarir) but hardly for the main village of Silwad which will continue to see its prospects for urbanization blocked by the settlement of Ofra. It will likewise limit crucial longer term developmental opportunities for the other villages, even if the Tel Asur Station would be evacuated.

Evacuation of Ofra and Bet El is unlikely without an Israeli-Palestinian agreement on provisional boundaries, which Israel would insist to run along the fence-trajectory.

