



DARTMOOR TRAINING AREA

Environmental Appraisal

# Socio Economic Effects

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## 12. Socio Economic Effects

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### 12.1 Introduction

- 12.1.1 This chapter assesses the potential economic and social effects that may arise as a result of the military training activities that take place on Dartmoor. The military activities may affect a number of socio-economic characteristics of the local area including tourism, agriculture, local employment and income as well as the quality of life of local residents.
- 12.1.2 This chapter has been prepared by Alistair Donohew, Senior Consultant at Entec UK Ltd (member of IED and associate member of the IEMA).

### 12.2 Context

#### Legislative Context

- 12.2.1 There is no legislation that is directly relevant to the social and economic specific issues within this Chapter.

#### Policy Context

- 12.2.2 The policies outlined in **Table 12.1** serve to set the context within which this Appraisal has been considered.

Table 12.1 Planning Policy Context: Socio-Economics

Policy Reference	Context
National	
PPG17 Policy 31	Activities requiring particular natural features should be allowed where the impact on natural features can be minimised.
Environment Act 1995	Environment Act 1995 (EA95) Part III Section 62 amended the National Parks and Access to the Countryside Act 1949 (NP49) by inserting ' A National Park authority ...in pursuing the National Park purposes shall seek to foster the economic and social well-being of local communities within the National Park' it goes on to say ' but without incurring significant expenditure in doing so, and shall for that purpose co-operate with local authorities and public bodies whose function include the promotion of economic or social development within the area of the National Park.'
Regional	
SWRSS Policy TO1	Local authorities, stakeholders and the tourism industry will promote the development of tourism by: <ul style="list-style-type: none"> <li>(I) Improving the quality and diversity of existing facilities and accommodation throughout the region, particularly where this would reduce seasonality.</li> <li>(II) Realising the potential of the region's environmental, cultural and heritage assets as a basis for the development of sustainable tourism, where consistent with their conservation.</li> <li>(III) Identifying opportunities for the development of new facilities and accommodation related to recreational cycle and footpath networks within the region.</li> </ul>
Local	
DNPMP Policy T1	Coordination and integration of the work of all those public and private sector bodies engaged in the promotion and marketing of Dartmoor will be promoted through the Dartmoor Partnership (the tourism forum for the Dartmoor area)
DNPMP Policy T2	Tourism initiatives based upon the special qualities of Dartmoor will be developed and visitors will be encouraged and assisted to learn about and appreciate the character of Dartmoor, its landscape and its people.
DNPMP Policy T3	Tourism-based businesses will be encouraged and assisted to undertake environmental sustainability audits of their operations and enterprises, within the framework of the European Charter for Sustainable Tourism in Protected Areas.
Other	
GPGPT Policy 2.4	Tourism can bring many broader benefits that will contribute to the economic and social well being of local communities as well as to individuals.
GPGPT Policy 3.25	RSS and LDF policies should therefore engender a positive approach to rural tourism proposals, applying the following principles: <ul style="list-style-type: none"> <li>(I) Wherever possible, tourist and visitor facilities should be housed in existing or replacement buildings, particularly where they are located outside existing settlements.</li> <li>(II) In statutorily designated areas 15 they should seek to conserve and enhance the qualities and features that justified the designation</li> <li>(III) Large-scale tourist proposals must be assessed against the whole range of sustainable development objectives<sup>16</sup>. This includes not only their transport implications but also other sustainability considerations such as how they assist rural regeneration and the well being of communities.</li> </ul>

Note 1 – The full names of the plans and guidance cited are given in Appendix 4.4, which details all policies and guidance that are relevant

## 12.3 Scope of the Assessment

12.3.1 The scope has been identified based on an understanding of the activities undertaken at Dartmoor Training Area (DTA), the site context and professional experience of undertaking assessments of similar proposals. The *EIA Regulations* indicate that the potential significant effects on 'population' should be considered and described in an Environmental Statement (ES). This section describes the process undertaken to define the scope of the assessment and the nature of the effects that are included in the assessment. Each effect has the potential to affect a range of receptors across a wide geographic area.

### Type of potential effects

12.3.2 There is a strong relationship between different socio-economic effects, and direct effects are almost always accompanied by wider indirect effects. For instance any increase in the amount of employment in an area may generate expenditure on local goods and services, stimulating the wider economy.

### Spatial extent of effects

12.3.3 Socio-economic effects may affect local residents or individuals within the wider regional area. Correctly defining the geographical scope of the assessment is therefore fundamentally important. The principal 'areas of interest' in this assessment are the Dartmoor National Park (DNP) and the towns and villages located in and around DNP. The area of analysis takes into account a 5km buffer around DNP where it is considered appropriate for the receptor being analysed and depending on the data source. The local area will be qualified where appropriate. The local effect is also assessed within the context of the wider regional area of Devon and Cornwall to which economic and social flows and interactions are expected to extend.

### Identification of receptors

12.3.4 A number of receptors have been identified through scoping and subsequent phases of the EA that were considered to be of sufficient importance that they could be significantly affected, namely:

- the local and wider economy (businesses both indigenous, inward investors and those within the supply chain) and the labour market (employees);
- residents (current) - addressed broadly as 'local community' in the assessment; and
- visitors or tourists (regular visitors).

12.3.5 These encompass a wider range of specific receptors that may be discussed throughout the EA, such as those residents living immediately adjacent to DTA, or specific groups such as tourists or 'the elderly'.

### Consultations

12.3.6 Consultations have been held as part of the Land Use Working Group meetings (see **Chapter 8**). The issues identified in these working groups meetings have been taken into account and informed the scope of the assessment of socio-economic effects.

## Effects Requiring Further Consideration

### Effects scoped-in to the Environmental Appraisal

12.3.7 Based on the approach defined above, the following effects have been scoped-in.

- Potential effects on the local economy and employment caused by presence of the military and its activities, specifically relating to:
  - direct employment and expenditure by the military,
  - wider potential effects on the tourism economy, and
  - effects on the livelihoods of local farmers and the agriculture sector.
- Potential effects on local residents and potential for nuisance associated with military activities.
- Potential effects on the perceptions and behaviour of regular visitors (tourists) caused by military activities.

### Effects subsequently scoped-in to the Environmental Appraisal

12.3.8 There are no additional effects that have been subsequently identified and scoped-in to the environmental appraisal.

### Effects not requiring further consideration

12.3.9 No socio-economic effects have been scoped-out of the EA.

## 12.4 Environmental Management Measures

12.4.1 Responsibility for the implementation of the mitigation measures lies with the MoD through DTE to Commandant DTA assisted by Senior Land Agent (SLA) DTE SW and MoD's Service Provider. Implementation and compliance will be ensured through DTA's EMS, management plans and DTE SW Standing Orders (SOs).

12.4.2 The existing mitigation and compensation measures comprise the following.

- Interference with livestock: Military personnel and attendees to training and events such as Ten Tors are instructed to avoid livestock. Ten Tors managers' weekend is held annually and managers are required to attend every 5 years. MoD pays for rights to train and provides compensation for stock injured or killed.
- Economy - sustainable procurement: Approximately 80 staff are employed on DTA, with preference given to local purchasing where cost effective. Local farmers are employed for stock clearance
- Tourism and recreation: Leaflets and information boards are used to encourage access outside the live firing programme, information about guaranteed public access and firing programme is made available on website, information boards, information centres on local radio and in military and civilian publications, cancellations of firing publicised in a similar way.

## 12.5 Assessment of Potential Effects

### Approach

12.5.1 The approach to the EA generally follows available best practice and developing guidance for undertaking socio-economic assessments, including:

- The Green Book, Appraisal and Evaluation in Central Government, HM Treasury 2003;
- A Standard Approach to Assessing the Additional Impact of Projects, English Partnerships, Second Edition 2004;
- Impact Assessment Guidelines, European Commission SEC (2005) 791, June 2005;
- Circular 04/06 (ODPM): Planning Inquiries Into Major Infrastructure Projects: Economic Impact Reports, DCLG (then ODPM) 2006;
- Assessing the Impacts of Spatial Interventions: Regeneration, Renewal and Regional Development, DCLG (then ODPM) 2003; and
- Introduction to EIA, Spon, 3<sup>rd</sup> Edition, 2004.

### Data Gathering and Survey Work

12.5.2 Preliminary data gathering for the assessment of social and economic effects was undertaken as part of a scoping exercise for the EA and was informed by a number of sources of information including:

- MoD websites, [www.army.mod.uk](http://www.army.mod.uk);
- The Dartmoor Society (2003), The 6<sup>th</sup> Dartmoor Society Debate, 'The Military on Dartmoor', Buckfast Abbey, Saturday 27 September 2003;
- Devon County Council (2006), *State of the Devon Economy*, January 2006;
- Devon County Council (2004), 'Tourism Trends, Devon and Districts- Distribution of Tourists by District, Peak of 2003 Season', Source: Corporate Consultation Services;
- South West Tourism and South West of England Regional Development Agency (2005), *Towards 2015- Shaping Tomorrow's Tourism*, January 2005;
- The Office for National Statistics, neighbourhood statistics website ([www.neighbourhood.statistics.gov.uk](http://www.neighbourhood.statistics.gov.uk));
- Tourism Associates (2006), *Sustainable Military Training on Dartmoor*, Final Report, March 2007; and
- Dartmoor National Park Authority, *The Dartmoor Economy 1994 – 2004*.

12.5.3 A site visit was also undertaken as part of the scoping exercise to identify the characteristics of the area around the site and the location of potential socio-economic receptors.

12.5.4 This Report draws significantly on information contained within a report prepared by Tourism Associates (March 2007) carried out as part of the assessment process. The methodology of this report has been summarised in the section below (**Section 12.5**). The key findings of the specialist reports have been reviewed, and have been used where

appropriate to help establish the current baseline and the predicted future baseline, and to assist in identifying the key effects upon the community and their significance.

### **Sustainable Military Training on Dartmoor Final Report, March 2007, Tourism Associates, University of Exeter**

12.5.5 This work had been specifically commissioned and the aims of the research undertaken was to “*inform a holistic case for sustainable military training on Dartmoor; and to inform the further development of the Environmental Management System for the Dartmoor Training Area (DTA).*” Specifically, the report describes the results of research to:

- investigate claims regarding the effect of a military presence on Dartmoor on land use, tourism, leisure uses and how this may change if current operations at site change or cease;
- investigate and assess visitor spend in light of military presence;
- investigate ‘importance’ of visitors and military presence on local businesses;
- understand effect of military procurement and other associated expenditure on local area/businesses; and
- explore how the military and local community interact and make recommendations for the future management of DTA.

12.5.6 The report describes a ‘multi-method’ approach including a number of studies undertaken between 1 January 2005 to 4 January 2006:

- research of secondary sources of information, including contextual information as well as research on the expenditure of the MoD (tenders, contracts, procurement, service agreements, etc.);
- a visitor survey - both day and overnight/longer stay visitors;
- semi-structured reviews - with day visitors and walkers (in the county);
- discussion groups - with visitors, Dartmoor residents and businesses;
- a survey of Ten Tors participants (2005 questionnaire survey);
- a survey of military personnel (survey of expenditure whilst at the DTA); and
- a local business survey - telephone survey.

12.5.7 This report was updated with information on MoD expenditure and issued as a Final Report in March 2007.

### **Survey of soldier expenditure, Ongoing 2007, Entec**

12.5.8 Entec have been commissioned to produce an up date of the soldier expenditure survey. The results of this study are not available at this stage and will be incorporated into an addendum to this Report.

## Significance evaluation methodology

12.5.9 There are no recognised standards for direct employment effects or easily applicable 'state of local society' standards<sup>74</sup> against which predicted effects of an activity may be assessed. This section describes some of the key factors that have been taken into consideration when determining significance.

### Review of Key Factors

#### *Distribution, duration and spatial extent of effects*

12.5.10 The DTA may provide a number of employment opportunities to the local area as well as representing a better economic use than is otherwise possible. In the context of the positive gain there may also be negative effects from the activities and these effects will be felt differentially between different sectors of the community (for example; ethnic groups, occupational groups, poor, house owners, unemployed, elderly, young, women, etc.). Therefore, the number of people affected (individuals, neighbourhood, local area, region, etc.) by a particular effect, either adversely or beneficially, is a key measure of the significance. Similarly, the likely duration of effect will also be important in the assessment, especially when considering whether it is reversible or irreversible. It should be noted that many economic effects are typically described as short, medium or long term in duration. Short-term in the context of this chapter, is broadly considered to be over the course of one to two years; medium term around two to five years; and long term greater than five years (this is provided as a guide to these definitions and should not be considered absolute).

#### *Thresholds*

12.5.11 It may be possible to predict where an activity may produce an unacceptable step change, for example, where the leakage of benefits (e.g. employment) out of the local area is substantially disproportionate to those within.

#### *Policy or contribution to recognised regeneration targets / outcomes*

12.5.12 The assessment also considers the effect of military activities in relation to current social and economic policy. The effects may also be significant when considered in relation to a recognised regeneration or economic target,

#### *'Triangulation'*

12.5.13 Multiple perspectives on significance are helpful. Triangulation refers to the practice whereby a number of perspectives can be used to interpret a single set of data, particularly taking evidence from wider research, interviews, consultations and representatives from interest groups (e.g. local residents, local economic development officers, etc.). These perspectives may help reveal either perceived or actual significance of particular effects. A method (not employed as part of this Report) may include a survey to estimate the measure of agreement with certain statements relating to the effects<sup>75</sup>.

12.5.14 Taking the various factors described above, the evaluation of the significance of socio-economic effects depends on the sensitivity or value of the receptor in question and the magnitude of change/effect that is predicted to result from military activities.

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<sup>74</sup> Glasson, J, Chadwick, A and R Therivel (2004) *Introduction to EIA: 3<sup>rd</sup> Edition*. Spon: London

<sup>75</sup> Measures of agreement (MoA) is defined as the number of respondents who agree with the statement, minus the number who disagree, divided by the total numbers of respondents (MoA of 1 = full agreement, -1 = complete disagreement). In: Glasson, J, Chadwick, A and R Therivel (2004) *Introduction to EIA: 3<sup>rd</sup> Edition*. Spon: London

### *Sensitivity of receptors*

12.5.15 There are a wide range of potential socio-economic effects as a result of the training activities that affect a range of different people and areas making a single overarching description of the sensitivity of the local community difficult to define. Therefore, the sensitivity varies to take into account the different types of receptors, who may respond differently to a particular effect, and the nature of the effect. For the purposes of this assessment the following are used to determine the sensitivity or value of receptors:

- potential for a differential effect on a vulnerable or sensitive group or community such as ethnic group, occupational groups, poor, house owners, unemployed, elderly, young, women, etc.;
- society and its economies are dynamic and can often have a considerable capacity to respond to cope or respond to change; and
- particular local needs or concerns that are specific to the site/surrounding area.

12.5.16 Based on the approach described above, the sensitivity of socio-economic receptors is expressed as High, Medium, or Low. **Table 12.2** provides a summarised definition of sensitivity for the purposes of this assessment.

**Table 12.2 Definition of Sensitivity**

Sensitivity	Definition
High	<ul style="list-style-type: none"> <li>• The receptor is predominantly comprised of vulnerable groups or communities. Therefore, the receptor is likely to be totally or substantially affected by an effect</li> <li>• The receptor is an economy* that is susceptible to total or substantial change as a result of the effect</li> <li>• The recognised needs or concerns of the receptor (e.g. community or firms) indicate that it will be highly sensitive to change as a result of the effect</li> </ul>
Medium	<ul style="list-style-type: none"> <li>• The receptor is comprised, in part of vulnerable groups or communities. Therefore, the receptor is likely to be partially or moderately affected by an effect</li> <li>• The receptor is an economy* that is susceptible to partial or moderate change as a result of the effect</li> <li>• The recognised needs or concerns of the receptor (e.g. community or firms) indicate that it will be moderately sensitive to change as a result of the effect</li> </ul>
Low	<ul style="list-style-type: none"> <li>• Minor or negligible affect on vulnerable groups or community</li> <li>• The receptor is an economy* that is susceptible to minor or negligible change as a result of the effect</li> <li>• The recognised needs or concerns of the receptor (e.g. community or firms) indicate that it will have a low / negligible sensitivity to change as a result of the effect</li> </ul>

\* An economy in this instance means the economic system of interest and this may comprise anything from number of local interrelated firms and individuals, to the entire UK economy.

Source: Entec

### *Magnitude of effects*

12.5.17 The determination of the magnitude of an effect essentially relies on professional judgement rather than using any measurable scale of effects. The magnitude of effect on a given receptor takes into account the following factors:

- the spatial extent and number of people or firms affected (for example, individuals, neighbourhoods, local area, region, UK economy);

- the duration of the effect (for example, temporary or permanent, irreversible or reversible, short-term, medium-term or long-term); and
- thresholds - where an effect will create an unacceptable step change.

12.5.18 Based on the approach described above, the magnitude of socio-economic and community effects is expressed as High, Medium, or Low. **Table 12.3** provides a summarised definition of magnitude for the purposes of this assessment.

**Table 12.3 Definition of Magnitude**

Magnitude	Extent	Duration	Thresholds
High	<ul style="list-style-type: none"> <li>• High number of firms / people – for example;. UK or region</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent and or irreversible change</li> </ul>	<ul style="list-style-type: none"> <li>• A dramatic 'step change'</li> </ul>
Medium	<ul style="list-style-type: none"> <li>• Sub-region or local authority area / district</li> </ul>		<ul style="list-style-type: none"> <li>• Moderate or partial difference</li> </ul>
Low	<ul style="list-style-type: none"> <li>• Low number of firms / people – for example; individuals or neighbourhood</li> </ul>	<ul style="list-style-type: none"> <li>• Temporary and or reversible change</li> </ul>	<ul style="list-style-type: none"> <li>• Minor or negligible discernable difference</li> </ul>

Source: Entec

12.5.19 It is possible that an effect affects a large number of people (high magnitude) but is only temporary (low magnitude). For example, a demand for a large construction workforce for a project. In this instance professional judgement is required to evaluate the overall magnitude of an effect. A further consideration, particularly for economic effects such as job creation or investment, relates to the 'additionality' of an effect, for example: 100 new jobs may be demanded by a development. However, a proportion of these may be taken by people from outside of the local area ('leakage') and a proportion may be taken by people who leave jobs in the local area to take up new jobs ('displacement'). Therefore the magnitude needs to take into account the net effect of a development: net of leakage, displacement, substitution and deadweight effects.

### Summary of Determination of Significance

12.5.20 As stated previously, it is assumed that significance is related to sensitivity and magnitude. **Table 12.4** presents a matrix which shows how the definitions of sensitivity and magnitude have been used to determine the significance of socio-economic effects:

Table 12.4 Definition of Significance

Magnitude	Sensitivity		
	High	Medium	Low
High	Significant	Significant	Not Significant
Medium	Significant	Significant / Not Significant	Not Significant
Low	Significant	Not Significant	Not Significant

Source: Entec

12.5.21 Therefore, this method may recognise an effect as significant when:

- a few sensitive (high sensitivity) individuals (low magnitude) are affected; as well as
- a large effect (high magnitude effect) on a sensitive regional economy (considered to be of high sensitivity, in this example).

12.5.22 Importantly, the significance of an effect is also a product of the policy importance of the effect and judgement will be required to assess how an effect may either contribute or be counter to regional/local policy objectives or regeneration targets. Policies relevant to socio-economic effects are summarised in **Section 12.2**.

### Potential Effects on Local Economy and Employment Caused by Presence of Military and its Activities

12.5.23 This section considers the significance of the effects that the military and its training activities have on the local economy and employment. The economic effects are potentially diverse and the scoping process has identified a need to examine a number of specific effects, namely:

- employment and expenditure effects on the local economy;
- wider potential effects on the tourism sector; and
- effects on the livelihoods of local farmers and the agriculture sector.

12.5.24 This section then collates the information on the various economic effects to produce a conceptual model of the economic flows that relate to DTA to help identify and understand the total economic effect of military activities.

### Current Baseline Conditions

#### *Employment and expenditure effects on the local economy*

12.5.25 The Dartmoor Economy 1994 - 2004 produced by the DNP Authority (DNPA) provides a detailed overview of the local economy and has been used here as the authoritative source for data. The Dartmoor economy (national park boundary) experienced a growth rate of 6.2% in per capita Gross Value Added (GVA) per annum between 1994 and 2004 outperforming both Devon and the national economy. For the period 2003-2004 this

growth rate was as high as 9.4% for Dartmoor. Strong output growth was a feature of the region as well and Devon also grew faster than the national economy. This strong local growth trend is also evidenced in employment terms with Dartmoor enjoying a growth rate of 3% pa between 1994 and 2004 compared to 2.1% for Devon over the same time period.

- 12.5.26 A breakdown of employment by sector in Dartmoor shows the hotels and catering sector to be the largest employer, accounting for 16.4% of the workforce (Dartmoor Economy 1994 - 2004). This is unsurprising given the existence of the National Park and importance of tourism in the local area. Other important local sectors in employment terms include distribution - wholesale and retail (15.9%), real estate/other business services (12.8%), construction (11%) and manufacturing (7.8%). These five sectors account for nearly 65% of the workforce.
- 12.5.27 There are high levels of part-time employment, largely due to one third of the workforce being involved either in retail or hotels and catering. 40.6% of the workforce is part-time compared with 25.8% nationally.
- 12.5.28 Sector outputs (that is economic output of different economic sectors) reveal the five largest sectors to be real estate/other business, distribution, construction, hotels and catering, and manufacturing. These sectors together contributed over 70% of Dartmoor's economic output for 2004.
- 12.5.29 Agriculture and forestry as a sector has not performed well and has experienced a decline of 1.6% per annum between 1994 and 2004. Mining and quarrying also declined over the time period by 2.9% per annum.

**Table 12.5 Sector outputs and growth rates for Dartmoor**

Sector	Proportion of total output (2004)	Growth rate (1994 – 2004)
Agriculture/Forestry	3.2	-1.55
Fishing	0.0	-21.09
Mining & Quarrying	1.5	-2.93
Manufacturing	8.0	5.63
Electricity/Gas/Water	0.3	5.95
Construction	14.9	12.72
Distribution	15.3	4.30
Hotels and Catering	8.9	4.78
Transport and Communication	4.3	6.27
Financial Services	1.6	6.44
Real Estate/Other Business	25.0	10.35
Public Admin	2.8	2.07
Education	3.3	3.51
Health	2.8	4.61

Sector	Proportion of total output (2004)	Growth rate (1994 – 2004)
Social Services	3.3	4.62
Sanitary Services	0.1	4.94
Other	4.6	5.28
<b>Total</b>	100.0	100.00

Source: The Dartmoor Economy: 1994-2004

12.5.30 Direct effects from the presence of the military on the local economy will arise from various economic actions that the military undertake as part of their operations and related activities. The various sources of expenditure were categorised and baseline contributions for each of these categories have been collected. This information has been taken from surveys undertaken as part of this assessment and *Sustainable Military Training on Dartmoor* (Tourism Associates, Exeter University, 2007). As data for each category has not been available for every year, the time period for the basis of this analysis is 2004/05. The categories are as follows:

- direct operational expenditure by DTA to suppliers (contracts, regular maintenance and other stock procurement - '**Supply chain**');
- direct expenditure by DTA to hotels for other personnel visiting the camp ('**Hotel spend**');
- direct expenditure of soldiers visiting the training camp ('**Soldier spend**');
- direct expenditure and other economic benefits from DTA hosting the Ten Tors and related events ('**Ten Tors event**'); and
- indirect/induced effects as a result of the knock-on flow of expenditure through the remainder of the economy ('**Indirect/induced effects**').

12.5.31 Information about each of these categories is described in fuller detail below.

12.5.32 **Supply chain.** A profile of expenditure was been created as part of the Tourism Associates Report based on the day-to-day core activities made by the MoD on DTA through the Army Training Estates - South West (ATE SW). Data was collected for contracts, tenders, procurement agreements and other spending with third parties with Devon and Cornwall used as the sampling frame. The estimates of the contribution of DTA to the local economy does not include indirect or induced spend and assesses only the core contract of Landmarc, the MoD's service provider, to service DTA.

12.5.33 The MoD service provider has been contracted to take care of the running and maintenance of the estate, administration and administration support to the rural dimensions of the estate, unit bookings, catering and training area management. It does not include individual military personnel unit spend on things such as entertainment and social activities.

12.5.34 The total spend reported is based on the spend categories which are shown in **Table 12.6** below. This Appraisal is interested in the level of expenditure within Dartmoor and estimates have been made of the proportion of each category that would be local (i.e. money that is spent and circulated in the local Dartmoor economy) and the proportion

within Devon and Cornwall, based on the figures produced in the Tourism Associates report. These figures and assumptions are shown in **Table 12.6**, below:

**Table 12.6 Direct spending on contracts, tenders and procurement; Dartmoor, and Devon and Cornwall (2004 - 2005 financial year)**

Spend category	Description	% Local to Dartmoor	Assumption
Utilities	Includes gas, water, electricity, heating, oil, telephone bills.	0%	Assume will be paid to national institutions, therefore spending will not be felt locally.
Rates	Paid to West Devon Borough Council.	100%	Local area will benefit from local authority spending on local infrastructure and services.
Estate management	Property and grounds maintenance.	100%	All in local area.
Staff costs	Gross staff costs for ATE SW personnel, does not include Landmarc personnel (at Dartmoor and Exeter).	80%	Of the total 78 jobs created it is understood that 72 jobs are located on Dartmoor and 6 located in Exeter (see below)
Professional fees	Consultants and professional services (e.g. solicitors).	5%	DTA is likely to appoint professionals from a wider region than locally.
Fuels (non-utilities)	Spend on diesel fuel.	70%	The majority of this spend will be local as units will buy fuel locally for planned trips. There may be some spend that occurs outside the local area for return trips.
Stock	Consumables to service operation of ranges.	100%	Assumes purchasing occurs locally.
Information technology	Purchasing computer equipment.	0%	Assumes that IT purchasing undertaken centrally.
Equipment support	Admin items such as photocopiers and tem assistance etc.	0%	Assumes that equipment purchasing undertaken centrally.
Contract	Refers to spend on recurrent contracts – e.g. the value of the contract with Landmarc to run the DTA and vehicle hire company, Lex.	60%	Estimate recognises that not all purchasing will be possible locally.

Source: Sustainable Military Training on Dartmoor (Tourism Associates, 2007) and Entec

12.5.35 **Table 12.7**, below, shows the average total spend attributable to DTA in the local economy. In 2004/05 total direct spending on contracts, tenders and procurement through ATE SW was £2,163,145 in the Dartmoor local economy and £3,103,695 in the wider region of Devon and Cornwall.

**Table 12.7 Total estimated annual spend attributable to DTA; Dartmoor, and Devon and Cornwall (2004 – 2005 financial year)**

Year	Total spend (comprised of categories above)	
	Devon and Cornwall (inclusive of Dartmoor)	Dartmoor
2002/03	3,149,256	2,220,848
2003/04	2,936,664	2,047,971
2004/05	3,103,695	2,137,717
2005/06	3,299,145	2,147,937

Source: Sustainable Military Training on Dartmoor (Tourism Associates, 2007) and Entec

12.5.36 It is estimated, in the Tourism Associates report, that in 2005/06 there were 78 FTEs directly attributable to DTA in the local economy. Seventy two of these jobs are located on Dartmoor while 6 are located in Exeter. The majority of these jobs are taken by people living in West Devon and Okehampton. The total gross wage bill for personnel working at Okehampton Camp was reported to be £1,008,684 for Landmarc employees. This wage bill is divided between the categories of staff costs and contracts.

12.5.37 **Hotel spend.** In addition to spending on contracts, tenders and procurement, the MoD makes additional spending on hotels for personnel stationed elsewhere and visiting DTA. This is estimated at approximately £10,040.50 for the period Nov 2004 to June 2005 (Tourism Associates, 2007). It is estimated that it is likely that the total amount for the whole year would be less than double this amount. Establishments in Okehampton, Tavistock and Yelverton benefit most from this additional spending.

12.5.38 **Soldier spend.** Information concerning soldier spend will be obtained from the soldier surveys undertaken as part of this assessment and is ongoing. **This information will be included in an addendum to this Report once available.**

12.5.39 **Ten Tors event.** Further information relating to this issue is outlined in **Appendix 1.1.**

12.5.40 **Indirect/induced effects.** Indirect effects are the extra production, employment and income generated in other sectors of the local economy as a result of the additional military expenditure and is measured using an economic multiplier. A multiplier is an economic tool used to measure how much additional spending may be generated in the local economy as a result of increased spending in one sector. The size of the multiplier can vary depending on a number of factors including the level of leakage (expenditure leaving the area), deadweight (expenditure that would have happened anyway), and displacement (expenditure that occurs at the expense of other expenditure). For example

the multiplier will typically be smaller for a more rural economy where a greater level of leakage occurs.

**12.5.41 An estimate of the total economic effect will be provided once the soldier spend work, has been completed.**

*The tourist economy*

12.5.42 Tourism is an important sector Dartmoor's local economy and since 1994 this sector has accounted for approximately 9% of GVA. Dartmoor is an important tourist attraction and many of the surrounding towns are highly dependent on this sector's contribution to their local economies. The Tourism Associates Report notes that there are conflicting estimates of the number of annual visitors to Dartmoor and currently no accurate and acceptable estimate exists. However, Tourism Associates point out that it is generally assumed to be approximately 11 million visitors per year (Tourism Associates Report, 2007). The sector is important not only in output terms but employment as well and it provides the largest sectoral contribution to employment. 16.4% of the local workforce work in hotels and catering and this sector contributes to much of the seasonal and part time employment in the local economy.

12.5.43 This sector has seen relatively slow levels of annual growth in output, experiencing 2.7% growth per annum between 1994 and 2004. This is possibly due to the declining importance of hotels and the growth in other types of accommodation as well as shocks from the outbreak of Foot and Mouth. Hotels account for 33% of the sectors total output but this contribution has fallen over the 10 year time period whilst the output of other lodgings (for example self catering) has grown steadily (although below the overall rate) and provides 16% of the sector's output (Dartmoor Economy 1994 – 2004).

*Local agriculture*

12.5.44 The forestry and agriculture sector has been performing poorly in the local context (Dartmoor Economy 1994 - 2004). Agriculture has seen a steady decline in output over the last ten years (average of -1.6% each year), mainly as a result of waning employment levels and low incomes (Dartmoor Economy 1994 - 2004) as well as shocks from the outbreak of Foot and Mouth. Mining and quarrying has also declined (average of -1.5% each year). These two industries have also been very erratic in their performance over the last 10 years which can be closely related to market values, demand and rapid changes in an industry's productivity (Dartmoor Economy 1994 - 2004).

12.5.45 A large part of Dartmoor is used for agricultural purposes and where these land uses overlap with MoD usage, the MoD pays for rights to train on the land that they use and provides compensation for stock injured or killed. Local farmers are employed for stock clearance which they do on horseback with trained dogs from those parts of the Range Danger Area (RDA) programmed for use prior to the commencement of live firing.

12.5.46 The Military enters into three types of financial arrangements with landowners with whom their activities intersect – training rights payments, commoners' disturbance payments and payments for Training On Private Land (TOPL). It is possible for one landowner or organisation to receive payments in one or more categories in any given year. These are shown in **Table 12.8**, below:

**Table 12.8 Financial Contributions (2004/05)**

Type of arrangement	Number of beneficiaries	Total amount paid
Training rights	10	£525,292.96
Commoner's disturbance payments	66	£224,251.50
Training on Private Land (TOPL)	5	£34,608.52
<b>Total value of payments</b>		<b>£784,152.98</b>

Source: Sustainable Military Training on Dartmoor (Tourism Associates, 2007)

### Assessment of Effects and Evaluation of Significance

12.5.47 Effects are assessed here first in terms of the sensitivity of the receptor, then in terms of the expected magnitude of the change caused by the effect. This establishes the basis for determining whether an effect will be significant or not. The assessment has been broken down into the employment and expenditure effects and each category of effect, tourism and agriculture.

#### *Employment and expenditure effects on local economy*

12.5.48 The size of the receptor (the local economy and labour market) may in some instances effect the sensitivity to economic changes. However, the baseline has indicated that Dartmoor local economy has experienced strong and sustained growth over the last ten years and displays a healthy level of diversification in a number of key sectors. This indicates a robust local economy that is better able to handle adverse economic shocks and therefore the general sensitivity of the local economy is assessed to be low.

12.5.49 Comment on effects:

- a. The full geographical extent of soldier spend and the likely monetary contribution are unknown at this stage, pending the survey results. Soldier spend may represent a sizeable contribution to the local economy however in the context of Dartmoor the overall importance of military trade to the economy appears to be much smaller than other sources of spending, notably tourism. A local survey of businesses undertaken in the Tourism Associates Report indicates that businesses (in retail, accommodation and transport industries) derive approximately 2.44% of their gross turnover from military personnel spend compared to 65.73% from tourists. The overall contribution is fairly small in relative terms and given the strong and diversified local economy this is expected to initiate a moderate or partial difference.
- b. Spending in the supply chain can have a far reaching effect on the local economy and can generate significant supply chain multiplier effects. Not all of this spending will however be local (in and immediately surrounding the Dartmoor economy) and is likely to occur in the wider Devon and Cornwall area. The size of this spend is not considered to be of a significant magnitude in relation to the local economy especially in light of the importance of other sources of spending in the local economy, for example tourist spending.
- c. The Hotel spend made by the military may be important to the local tourism economy given the fact that hotels are declining in comparison to other preferred

forms of accommodation among tourists. This spend may therefore represent an important contribution to this sub-sector of the hotel and catering sector of the economy.

- d. Indirect and induced: **This will be completed when the soldier spend information is available.**

**12.5.50 The assessment of the effect on the local Dartmoor economy can not be estimated at this stage and will be completed when the soldier spend information is available.**

*Potential effects on the tourist economy*

- 12.5.51 In assessing the sensitivity of the local economy to changes in tourism it is necessary to understand the relative importance of this sector to the economy and the level of diversification or strength of other sectors to sustain a loss in this sector. Information in the baseline section of this report has shown tourism output to be declining, although this may be largely due to changes in the composition of tourism or potentially as a result of the foot and mouth outbreak. For example there is a decline in the contribution of hotels (a high generator of output) and increase in self catering which would typically generate lower levels of output.
- 12.5.52 Although the overall Dartmoor economy appears to be diversified with strengths in other sectors, (notably real estate and other business activities, construction, distribution and manufacturing) tourism (represented by hotels and catering) remains the largest generator of employment locally and any loss in tourism trade would therefore have a notable negative effect on the local economy and employment. The local economy and labour market is therefore assessed to be of medium sensitivity.
- 12.5.53 The magnitude of the effect is influenced by how and to what degree tourism behaviour may change if the military training activities were to cease. This requires an understanding of current perceptions of military activities by tourists and local visitors and how they are affected by the training activities.
- 12.5.54 There are a large number of visitors to Dartmoor comprised of both people from within the area (locals) and outside of it (tourists) and their daily spend contributes a significant injection into the local economy. Significantly (for this assessment) this industry currently thrives alongside the current military training activities on Dartmoor, and the general consensus among both visitors and local business people surveyed as part of the Tourism Associates Report is that military cessation is unlikely to have a significant effect on the number of people visiting Dartmoor. Reasons given to justify Tourism Associates' views included that the military activities are located on a relatively inaccessible part of the moor that only more 'adventurous walkers' expressed a desire to visit and that military activities do not currently interfere with visitors enjoyment of the moor in any major way. Most attitudes towards the military's presence appeared to be accepting of their presence and displayed understanding of their need to train there and was even favourable amongst some people (Tourism Associates Report).
- 12.5.55 Respondents (from the Tourism Associates' visitor survey) were asked if and how their behaviour would change were the military to depart Dartmoor, 93% said they would make the same number of visits to Dartmoor were the military to leave and only 4% said they would make more visits. Amongst a survey of local businesses, when asked their expectations of changes in visitor numbers were the military to depart the DTA, 72% said there would be no change in the number of visitors and 20% felt that visitor numbers would increase.
- 12.5.56 The Tourism Associates report suggests that most visitors and tourists to Dartmoor appear impartial about the presence of the military. The majority of those visitors surveyed

indicated they would not visit Dartmoor more often if the military were to depart. Furthermore it has not been shown that the military are keeping people away. Therefore, the magnitude of the effect of military training activities on the tourist economy is assessed to be low as there is likely to be only a minor discernable difference to the local tourism economy if the military were to leave. The effect of military training activities on the tourism sector is assessed to be neutral and not significant.

#### *Potential effects on the agriculture economy*

- 12.5.57 The agriculture sector has a number of features that suggest a highly sensitive local economy. This sector is declining in terms of both employment and output and is therefore already susceptible to negative changes. The departure of the military would mean a loss of income for farmers and employment (range clearers).
- 12.5.58 Total payments made to farmers and landowners in 2004/05 amounted to £784,152.98. The total sector output for 2004 was approximately £12.19 million (Dartmoor Economy 1994 – 2004). The duration of this effect is likely to be long term as the agriculture sector is already in decline and opportunities such as that which the military provides for diversifying and supplementing local farming incomes are therefore very important. New and other means of diversification may be difficult to find. The magnitude of this change is expected to be medium. This effect is assessed to be positive and significant.

#### **Potential Effect on Local Residents and Potential for Nuisance Associated with Military Activities**

- 12.5.59 This section looks at the potential disturbance to local residents that may be caused (either directly or indirectly) by the presence of the military and their training activities on Dartmoor.

#### **Current Baseline Conditions**

- 12.5.60 There were approximately 32,320 people living within Dartmoor National Park in 2001 (Census, 2001) in more than 30 towns and villages within the Park boundary. There are few residential properties within DTA or close to these training areas.
- 12.5.61 The Tourism Associates Report undertook a number of exercises to gather public perceptions regarding the military and their presence in the local area. These included a general visitor survey, semi-structured interviews with visitors, discussion groups that included local residents, local business people and day visitors (from within Devon but outside the DNP boundary). Whilst a variety of issues were raised relating to possible interference with walkers on the moor, when asked about effects on social and local community life, the discussion groups did not raise any major issues. Most concerns relating to the presence of the military related to disturbance to visitors to the moor and not to community life.
- 12.5.62 Some potential effects that were discussed as issues during discussion groups among residents and business people concerning the military's effect on local life were generally favourable. The positive effects that were cited were mainly economic in nature and included increase in local income, contributions to local B&B business, commoners' compensation and protection of flora and fauna. The military's C-FAR programme was specifically mentioned. This is a project for young offenders and is regarded as being a major positive for local community life. Negative issues that were raised included interference with local livelihoods (farmers), military traffic congestion, and the perception that military personnel 'create trouble' on local nights out.
- 12.5.63 Perceptions relating to the departure of the military for the local economy, society and community and culture, it was felt that the effects would be mainly negative. Jobs and

supplementary income would be lost, the area would become subject to additional tourism with which the existing infrastructure could not cope and the physical environment would decline and fall into disrepair without management of MoD. There was the general perception that the advantages of the military outweighed the disadvantages and they are preferred to other alternative neighbours such as increases in day visitors with dogs and litter.

### Assessment of Effects and Evaluation of Significance

12.5.64 The sensitivity of the local community is assessed to be medium as although they are unlikely to be comprised of large numbers of vulnerable groups or groups that may be particularly sensitive to changes, it is often found that communities in quiet rural areas value these characteristics of their location very highly and may be more sensitive to disturbances.

12.5.65 The magnitude of the effect is dependent on the extent of the level of interference or disturbance caused to local life. From the baseline information collected in surveys and discussion groups it appears that opinion is generally favourable towards their presence in general and neutral towards how they may affect social or community life. The nature of the issues raised in relation to local community life were more often positive than negative. The magnitude of the effect on local community life is therefore considered to be low. This effect is therefore considered to be neutral and not significant.

### Potential Effect on Tourists and Regular Visitors Caused by Military Activities

12.5.66 This section considers the potential effects that the military and its training activities may have on visitors (both local and tourists) to Dartmoor.

### Current Baseline Conditions

12.5.67 It is estimated that 11 million visitors visit DNP annually. A general visitor survey was undertaken as part of the Tourism Associates Report of visitors to the park. Some key characteristics are highlighted below:

- 47% of those visiting the park were day visitors and 53% were tourists (staying guests) of which 32% were staying on Dartmoor or within 5km buffer zone and 21% were staying in locations outside this area;
- The most popular towns where tourists were staying outside of Dartmoor were Dartmouth, Exeter, Torquay, Paignton, Newton Abbot and Plymouth. The average stay for those staying outside Dartmoor was 10 nights and 7 nights for those staying on Dartmoor. Average spend on accommodation per person per night was £18.44;
- Total spend on the day of the interview was an average of £8.43 per person across the entire sample. The greatest spend was indicated by tourists staying on Dartmoor (£11.18), tourists staying elsewhere had a daily spend of approximately £9.74 and day visitors spent an average of £6.55;
- The number of previous leisure trips to Dartmoor undertaken in the previous 12 months was 23 for day visitors and 1.68 for staying visitors;
- 86% of visitors knew that military trained on Dartmoor with the highest levels of awareness among day visitors; and
- Respondents (from visitor survey) were asked whether military activities have had any positive or negative effects on previous trips to Dartmoor. 65% answered that military

training has had no effect, 16% reported a positive effect and 18% reported a negative effect.

- 12.5.68 Respondents (to the visitor survey in the Tourism Associates Report) were asked whether military activities have had any positive or negative effects on previous trips to Dartmoor. 65% answered that military training has had no effect, 16% reported a positive effect and 18% reported a negative effect. The most frequently cited responses relating to positive effects included enjoyment from seeing military activity, appreciation for the military need to train and that Dartmoor is an ideal location, feelings that the moor is big enough to share with the military and that military restricted areas encourage wildlife to thrive. The main responses relating to negative effects were general unhappiness with military usage of moor, perceived risk from live firing and unexploded ordnance, noise disturbance and restricted access. Military objectors mention access restrictions, noise, visual intrusions of warning devices and unsightly buildings, destruction of topography through ordnance and digging, and vehicle access by military and civilians.

### Assessment of Effects and Evaluation of Significance

- 12.5.69 To assess the extent that military activities affect visitors it is important to understand visitors perceptions of the military and more importantly how these may affect visitor behaviour. Although a number of negative perceptions exist relating to risks and threats associated with the presence of the military on Dartmoor, it is important to understand how relevant these perceptions are to the reality of the situation. Just over half of visitors interviewed had seen evidence of military training, with the most common forms being military vehicles and aircraft, military personnel and notices and warning signs. Only a small minority of walkers had actually seen or heard evidence of firing. There were no reports of finding ordnance of any kind.
- 12.5.70 Over three quarters of those interviewed answered that they do not access the military training area. Of those who suggested they do, they note that access was infrequent due to remoteness. The majority said that they would not use that part of the moor more often even if access permitted it. Of those who would, their motives were curiosity, desires to climb highest peaks and walk in less populated areas. Most of those interviewed answered that the military had no impact on their use or enjoyment of moor. There is a general consensus that the military must train somewhere and Dartmoor offers the perfect natural environment (Tourism Associates Report, 2007).
- 12.5.71 Respondents (from the visitor survey) were asked if and how their behaviour would change were the military to depart Dartmoor, 93% said they would make the same number of visits to Dartmoor were the military to leave. 4% said they would make more visits.
- 12.5.72 Whether the military training activities represent a positive or a negative presence depends largely on peoples interests. It appears that the majority of people are neutral to the military and its training activities. The baseline information indicates that the receptor (visitors) is unlikely to be susceptible to change as a result of the effect, the majority of visitors surveyed indicated they will not visit park more often if the military departs. In support of this there are a high number of repeat visits to the park among local visitors. Thus the receptor is considered to be of a low sensitivity. The magnitude is assessed to be medium as there is likely to be only a minor or negligible discernable difference in visitor behaviour were military training activities on the moor to cease. This effect is therefore assessed to be neutral and not significant.

## 12.6 Summary of Significance Evaluation

12.6.1 A number of socio-economic effects have been assessed in the preceding sections and the following table provides a summary of the assessment of their significance:

**Table 12.9 Summary of significant effects: Socio-Economics**

Receptor and summary of predicted effects	Type of effect <sup>1</sup>	Significance <sup>2</sup>
The Local economy: direct and indirect employment and expenditure effects	TBC	<b>This effect will be determined when the results of the soldier spend survey become available later on in the year.</b>
The Tourism economy: indirect effects resulting from military presence on DTA	N	NS The results of the Tourism Associates Survey work would indicate that the majority of visitors to Dartmoor would not visit the area more frequently if the military were to leave.
The Agricultural economy: direct effects as a result of payments to landowners and employment of local people	+ve	S The employment and payments that the military provide to the local agricultural economy are considered to be having a significant positive effect for this declining sector.
The local community: nuisance effects resulting from the presence of the military	N	NS Information from surveys and consultation would indicate that generally the local community is generally neutral with regards how the military may affect community life.
Tourists and regular visitors to DTA: effects resulting from the presence of the military	N	NS Results from visitor surveys show that few visitors access that training areas and would not use that part of the moor even if the military were to leave. Most of those interviewed answered that the military had no impact on their use or enjoyment of moor.
<b>Key/footnotes:</b>		
1.Type of effect	-ve = negative + ve = positive N = Neutral ? = unknown	2. S Significant or NS Not-significant <b>This simple significance scale should not be altered</b>

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