JOURNAL OF FARM MANAGEMENT VOL.13. NO..6. PAGES 393 - 418

REFEREED ARTICLE

THEN AND NOW: NORFOLK FARMERS' CHANGING RELATIONSHIPS AND LINKAGES WITH GOVERNMENT AGENCIES DURING TRANSFORMATIONS IN LAND MANAGEMENT

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Government support has been influential in substantially changing farmers' approaches to land management since the Second World War. Government agencies are now aiming to assist farmers to become more sustainable in their land management. A five year trial involving 31 farmers managing 12,140 hectares in mid Norfolk revealed that farmers' perceptions of and subsequent relationship with government agencies had changed significantly over the last 40 to 50 years. This change reflected a sharp drop in linking social capital when measured using standard assessment tools. While the UK government repeatedly states its desire for a partnership approach with farmers, there is evidence to suggest a large 'rhetoric: reality' gap. Farmers described this gap as physical and social distance between themselves and government agencies; professional disrespect for the service they received; coupled to increasingly divergent agendas and feelings of "Buy-Out" (not "Buy-In") towards government policy. Levels of trust in government agencies varied between farmers. However, a general decline in trust led to defensive relationships which caused a delay in farmers' transition to more sustainable land management. This was particularly marked amongst key policy targets, such as polluting farmers. Government agencies should acknowledge the problem of 'Buy-Out' and prioritise institutional reform to rebuild strong working relationships with farmers and thus facilitate the wider transition to more sustainable land management.

Key Words: linking social capital; sustainable land management; polluting farmers; agricultural policy; institutional reform

1. The Transition Towards More Sustainable Land Management

The UK government has changed the land management practices of its farmers in the past (Sheail, 1995). Throughout the latter half of the 20th century, such changes were achieved through a mixture of market support policies and extension activities (Winter 1996; Dobbs and Pretty, 2004). Widespread adoption of intensive farming practices, often prompted by government advice and fuelled by government subsidy, led to serious and sustained environmental damage (Natural England, 2008), which required a change in agricultural policy to emphasise more sustainable land management (Defra, 2006a). More recently, the government's ability to encourage farmers to change their behaviour to become more sustainable has had mixed results, in spite of the provision of incentives delivered through agri-environment schemes. The impact of new policies has, arguably, been lowest on intensively farmed arable land where the environmental impact of farming has been greatest and the reach of agri-environment schemes has been most limited (Morris *et al*., 2000; Wilson and Hart, 2000; CA, 2006).

Changing the behaviour of farmers through policy mechanisms is a challenging task for policy makers and delivery agents alike, because it involves the attitudes, motivations and deepest values of farmers and not just

economic rationality and policy coercion (e.g. Gasson, 1973; Röling, 1985; Ward and Lowe, 1994; Burton, 2004; Burton and Wilson, 2006). In the past, agricultural extension agents emphasised a close working relationship with farmers to ensure changes in the attitude and behaviour of individuals and the efficient uptake of grant aid (Young, 1963; Dexter, 1976). These relationships with farmers were often characterised by mutual trust and respect developed through face-to-face meetings and farmer groups over lengthy periods of time (described by Carter, 1978). Both the National Agricultural Advisory Service (NAAS) and the Agricultural Development and Advisory Service (ADAS) relied on highly-trained technical staff who had practical experience of farming and were thus able to command respect from farmers (Jones, 1965; Keenan, 1966). Emphasis was placed on the ability of advisory staff to understand the heterogeneity of farmers, the socio-psychological aspects of change and communicate with farmers on their terms (Stevenson, 1969). Dexter (1976) explains how extension agencies also provided practical farm advice to policy makers regarding the technical content of farm-related policies.

Today, farming policy has changed to reflect the need for more sustainable land management. The UK government still emphasises the need for active partnership with the farming community to ensure that these more sustainable behaviours are widely adopted (Defra, 2003 & 2006a). Defra's stated aim is to stimulate *"real behaviour change and innovation rather than mindless compliance (or even mindless non-compliance)"* (Defra 2006b:3). Considerable effort is being exerted by government to facilitate this change, with an emphasis on better delivery, advice, training and skills. Positive relationships are still seen as important to change the underpinning values from which farmers make decisions, thereby ensuring that schemes become more than 'temporary bribes' (Morris and Potter, 1995:52; HM Treasury, 2006).

It is well-established that trusting relationships coupled with inspiration and local support help farmers to change their attitudes and behaviour (Pretty *et al.,* 2001; Cuddeford *et al.,* 2004). Conversely isolation and negative feelings make change more difficult (Ostrom, 1990). The value attached to relationships constitutes a form of capital, which has come to be known as social capital. This includes a person's contacts and networks; the common rules, norms and sanctions that regulate behaviour together with the reciprocity and exchanges that build friendships, respect and ultimately trust (Pretty and Ward, 2001). Wider societal connections include feelings of social inclusion, political engagement and empowerment that help individuals feel a part of society as a whole (Grootaert and Van Bastelaer, 2002). Social capital has gained popularity over the last decade, however, overuse (and even misuse) of the term has attracted criticism, particularly with respect to the definition of the concept (Fine, 2007).

Three types of social capital are commonly identified. These are the ability to work positively with those closest to us who share similar values (referred to as bonding social capital). Working effectively with those who have dissimilar values and goals is called 'bridging social capital'. Finally the ability

to engage positively with those in authority either to influence their policies or garner resources is termed linking social capital (Woolcock, 1998, 2001; Pretty, 2005). Linking social capital encompasses the skills, confidence and relationships that farmers employ to create and sustain rewarding relationships with staff from government agencies.

To gain the most from social capital, individuals and communities require a balanced mixture of bonding, bridging and linking relationships (NESF, 2003). Social capital is a valuable asset that helps farmers to achieve both the government's and their own goals to become more sustainable whilst maintaining business profitability (Dobbs and Pretty, 2001).

2. Methods

Between 1999 and 2004 the Countryside Agency, in partnership with other organisations, established and implemented a suite of nine Land Management Initiatives (LMIs). The aim was to demonstrate how England's land management and farming systems could respond to the changing demands on agriculture in ways that would maintain a healthy, attractive environment and contribute to thriving rural economies and communities (CA, 2002). The Norfolk Arable Land Management Initiative (NALMI) was one of the nine LMIs. Thirty one farmers (16 arable and 15 mixed) in and around the NALMI area in mid Norfolk were chosen as a representative sample of farmers in this predominantly arable area using established qualitative sampling techniques (see Silverman, 2005; e.g. Lobley *et al.,* 2005). Each farmer completed a NALMI whole farm plan over a period of 2-4 years. Whole farm plans included detailed economic, environmental, resource use and social/ community evaluations of the farm business.

Social capital was investigated using a range of quantitative and qualitative techniques based on ethnographic and grounded theory approaches (developed by Glaser and Strauss, 1967. De Ulzurrun, 2002 and Svendsen, 2006 provide practical guidance). Semi-structured interviews, participant observation and reviews of written sources were all used by researchers who had become embedded in the community over a period of 5 years (see Silverman, 2005). Prolonged engagement was helpful, particularly by providing longitudinal data which helped develop hypotheses of causality. Farmers were assured of complete confidentiality and the reciprocal exchange of gifts and information helped to develop trust with participants (Lyon, 2000). Farmers readily grasped the concept of social capital and provided detailed and insightful comments regarding its importance in rural life and in farming.

The social capital of each farmer was measured using a locally-tailored version of the World Bank Social Capital Assessment Tool (World Bank, 1998; Grootaert and Van Bastelaer, 2002). Five aspects of social capital were assessed at three levels (micro; meso and macro). The five aspects were: i) the farmers' feelings of social cohesion and inclusion; ii) engagement in groups and networks; iii) experience of collective action and/or cooperation; iv) feelings of trust and solidarity; and finally vi) empowerment and political action. The three levels (Table 1) are farmers' relationships with other farmers (micro: bonding social capital), with non-farming neighbours (meso: bridging

Table 1. Aspects of social capital measured by the NALMI project

	Micro: Bonding	Meso: Bridging	Macro: Linking
1. Social cohesion and inclusion	Number of potential contact points with other farmers; regularity of engagement	Number of potential contact points with non-farming neighbours; regularity of engagement	Number of potential contact points with government officials; regularity of engagement
2. Farmers' engagement in groups and networks	Membership, attendance and leadership of farming groups	Membership, attendance and leadership of village groups	Use of farming or other organisations to engage with Government (e.g. NFU)
3. Experience of collective action and/or cooperation	Past and present cooperation with other farmers (e.g. machinery sharing or cooperative marketing)	Past and present cooperation with local non-farmers (e.g. joint projects to benefit the local community)	Past and present cooperative activity with government agencies (e.g. using farm for trials or training events; engagement with agri-environment schemes)
4. Feelings of trust and solidarity	Feelings of trust between farmers. Areas of conflict	Feelings of trust towards non-farmers. Areas of conflict	Feelings of trust towards government officials. Areas of conflict
5. Empowerment and political action	Feelings of empowerment. Contribution to agricultural policy undertaken with other farmers	Feelings of empowerment. Contribution to rural policy undertaken with other members of local community	Feelings of empowerment. Personal engagement with agricultural and rural policy (e.g. contribution to consultation documents; writing to MP; attendance at demonstrations such as Countryside March)

social capital) and with government agencies (macro: linking social capital). Relationships with buyers were also investigated as an important aspect of linking social capital (see Hall, 2008). Social capital at all three levels was explored during interviews, farm visits, seminars and casual conversations. Farmers also provided a self assessment of their social capital using a shortened questionnaire. In all cases, social capital was explored from the perspective of the farmer, providing future opportunities for researchers to examine social capital from the perspective of non-farmers and government agency staff.

The 31 farmers are reported here with fictitious names (e.g. Farmer A is the arable estate owner Alan; Farmer B, Bob, has a small arable farm with some horses kept at livery; Greg and Ginny, farmers G, have a mixed arable and beef enterprise).

3. Changes to Linking Social Capital

Qualitative data suggest that NALMI farmers' relationships with government agency staff have changed substantially over the past 40-50 years. Nostalgia can be a hazard when investigating personal history (Newby, 1987; Campbell *et al*., 1999) and farmers were repeatedly challenged to provide evidence that the relationships were different in the past. The evidence included: i) recall of names without forewarning or recourse to notes or diaries; ii) memory of the specialisms of staff; iii) recall of events whereby staff had influenced land management; and iv) comments on the relative

calibre of different staff. Corroboration amongst family members provided further evidence of accurate recall. As we show, the data suggest that relationships were indeed closer in the past.

The consequence of these close relationships was that during the 1960s, 1970s and to a lesser extent the 1980s, farmers developed strongly held norms and cultural expectations of the government agencies they dealt with. NALMI farmers expected to deal with technically skilled, experienced and professional staff (referred to as Ministry officers), who could be easily contacted, knew their farm, and were enthusiastic to encourage change on farms (expectations described by Young, 1963 and recorded more recently throughout England and Wales by HSE, 2005). Face-to-face contact was expected; it underpinned the relationship, providing genuine two-way communication enabling the development of trusting personal relationships. Ministry officers were expected to understand and make allowances for the social aspects of change and to use their ingenuity, creativity, tact and enthusiasm to help individuals change in different ways (experiences compellingly described by Stevenson, 1969). They were expected to know the limitations of the written word when dealing with farmers and to understand that written communication would need to be adapted to reflect each different local situation. Finally, the NALMI farmers believed that Ministry officers should be always reliable and professional, providing leadership and cohesion within the farming community.

3.1 The Historic Relationship with 'The Ministry'

NALMI farmers, particularly over the age of 45,[1] described with warmth and animation personal narratives of their close working relationships with staff from the NAAS and ADAS. Their response to open questions about the nature of their relationship with these agencies was an extensive display of vividly recalled memories. Information regarding their emotional responses to the relationship was particularly forthcoming. In total, 151 substantive comments regarding the relationship between NALMI farmers and Ministry officers were analysed. 97% were positive responses with only four negative responses (2.6%). Table 2 shows that both the nature of the organisation and the personal attributes of the Ministry officers were important to the creation and maintenance of social capital and the impact on land management.

Evidence that the relationships had been important to many NALMI farmers was provided by their impressive recall of names, particularly of ADAS officers serving in the 1970s and 1980s. Ten farmers could recall one named officer and a further seven could recall up to five different officers, together with their subject expertise. Typical responses illustrated the knowledge and experience of advisers, their close engagement with the farming community and the trust and regard in which they were held. For example rable farmer Quentin described his long and positive relationship with a local ADAS officer, Jack Webdale: *"He was so jolly - and knew the job.*

1. NALMI farmers varied in age with one farmer in his late twenties, 3 in their thirties, 7 in their forties, 15 in their fifties, 4 in their sixties and one farmer was in his seventies. The average age of NALMI farmers was lower (53) than the UK average of 57 (ADAS 2007).

Table 2. Farmers' assessment of their past relationship with government agencies (author's survey, 2000-2005)

	Key Factors		Number	%
POSITIVE RESPONSES (97.4%)	**The Nature of the Organisations (NAAS and ADAS)**	Knowledgeable, experienced staff	28	18.5
		Staff retained in the organisation so long term relationships	23	15.3
		Easily accessible staff	21	13.9
		Shared goals between farmers and government	10	6.6
		Local offices	9	6
		Simple relationship	7	4.6
		Organisations brought together farming community	5	3.3
		Other (proactive approach; free service; delegated responsibility)	11	7.3
	The Personal Attributes of the Officer	Warmth of character (relaxed, friendly approach)	17	11.3
		Personal integrity (honest, trustworthy, hard working)	8	5.3
		Staff demonstrated trust in farming community	5	3.3
		Other (enthusiastic; genuine desire to help)	3	2.0
NEGATIVE RESPONSES (2.6%)	**The nature of the system**	Grants focused on larger farms; old boys network	4	2.6
		Total	**151**	**100**

He fitted in so well - he was a part of the community. We all trusted him completely. In those days - they [ADAS advisers] *knew the farm better than you did. They knew the farm inside out. He knew individual fields. He dealt with anything - pigs, cattle, arable - the lot. His technical knowledge was good as well. He seemed to know everything and everyone. He always followed things up as well. He also had a very good way of giving advice - it was a gentle way of giving information - but he would always want to tell a good story as well! You wouldn't get away without listening to his stories first! He really did know so much. At the end* [of the discussion], *he* [Jack Webdale] *would just say a couple of things - and he would always be right*." When asked how long Jack was in the job for, Quentin laughed and said *"he was always around. He was always there. He was around for an eternity!"* Rothstein (2000), in her description of community's collective memories of trust, explains how this regular face-to-face contact, maintained over many years,

assists the development of interpersonal trust and relationships characterised by mutual integrity and shared humour. Agricultural knowledge was also a key factor in building trust.

Quentin's experiences were similar to those of arable farmer Len, who also recalled the same officer, noting his accessibility and the way in which he helped farmers to complete the Ministry's forms: *"Jack Webdale - well you could ring him at home in the morning - you could ring him at any time. He was a brilliant chap. He was based at King's Lynn. He came out to see me - he was fantastic. He sat down in that chair that you are sitting on now, in this office, for one and a half hours and at the end of it there was a six year plan for the farm"* Jack was not the only officer to gain critical acclaim from farmers. Speaking of Norman Chitterton and his colleagues in ADAS, pig farmer Ian exclaimed *"They were bloody brilliant they were - they were super chaps!"* feelings echoed by Francis, a dairy farmer, of Philip Weston of NAAS who *"... was like a folk hero amongst the farmers."* Accessibility, particularly the ability to contact known staff directly by telephone, was clearly important to many NALMI farmers, together with the ability and delegated responsibility to take far-reaching decisions to benefit the farm.

NALMI farmers were asked what the consequences of this strong relationship were to them, to the farm and to the farming community. The first consequence was that visits and occasional unannounced drop-ins were eagerly anticipated. Francis recalled that ADAS staff *"....were household names. You used to look forward to them coming out to the farm."* Secondly, farmers felt that no time was wasted prior to any visit on checking records and ensuring compliance was correct: there was no fearful anticipation of the visit and no stress. And thirdly, farmers felt that they could be open and honest about both progress and mistakes or problems. This openness was in the full expectation of empathy and a mixture of encouragement and support to overcome problems. Farmers remarked that ADAS officers were interested to learn of progress in the various improvement projects; small steps towards shared goals were discussed and progress praised. Farmer events, organised by ADAS, contributed to both bonding and linking social capital in the farming community, facilitating the reciprocal exchange of technical and practical information about land management.

As a result, farmers felt that Ministry officers were very influential in stimulating and supporting changes in their values and norms of land management. A majority of farmers believed that during the 1970s and 1980s, Ministry officers effectively assisted a transition in land management on their farms, sometimes against their farming instincts, towards goals of higher productivity and intensification. In part, this was due to the ability of staff to provide answers to practical problems based on experience, knowledge of other farms and the support of the organisation to delegate responsibility for this task. For ten NALMI farmers, the relationship led to multiple, often annual, schemes to change the farm, with each scheme building on the advances of the previous one.

3.2 Distancing from 'The Ministry'

In April 1992, MAFF replaced five regional offices and 19 divisional offices (including Norwich) with regional service centres, a process which, in the view of Winter (1996), fractured local relationships and created feelings of distance between farmers and the organisation. In 1997, ADAS was fully privatised and all services became chargeable (Ingram and Morris, 2007).

Twenty five NALMI farmers reported that these changes created new feelings of distance between themselves and government agency staff. The degree to which they felt this distance depended largely on their age: older farmers all described more dramatic feelings of distancing. Four of the youngest farmers did not feel personally any distancing, although two had heard their parents talk of a much closer relationship in the past. Peter (a 32 year old diversified farmer), believed that his relationship with government was significantly closer now than it had ever been in the past due to his recent diversification. A further 11 farmers felt that whilst overall the relationship should now be described as more distant (specifically described as less trusting), during the 8-10 months immediately prior to the final interview in early 2005, tangible links with government agency staff had increased (from zero) due to meetings about the Single Farm Payments, waste regulations and the Environmental Stewardship schemes.

NALMI farmers identified different dates when they felt that the relationship had changed. When asked, no farmers selected either the 1950s or the 1960s; in this period, the oldest farmers described a strengthening relationship. Of the 22 farmers who provided dates for distancing, two identified the 1970s; 12 farmers chose the 1980s; five the 1990s, and two suggested that the change occurred after 2000. 1987, the year in which the privatisation of ADAS became apparent to NALMI farmers and Jack Webdale retired, was chosen by three farmers. One farmer felt distancing occurred during both the 1980s and the 1990s. Of the nine farmers who could not provide an answer, six had moved into the area and did not feel qualified to comment and the other three felt changes had occurred, but so slowly as to be unable to put a finger on any particular date.

There were several consequences of these changes. First, farmers either looked elsewhere for advice or stopped taking advice. Alternative sources of advice included merchants, independent agronomists and land agents. Second, after privatisation, the nature of staff employed by ADAS changed. Francis recalls, *"the best went first. Gradually the personnel changed."* Sam agreed with these sentiments; *"In the beginning of the privatisation of ADAS they got rid of people. The best ones were poached as the older ones retired. Then the younger ones were institutionalised – they were no use to the industry then."* Sam believes that as the calibre of ADAS staff declined, so the distancing process between farmers and ADAS proceeded even more rapidly.

Possibly the most significant impact of these organisational changes was the loss of long-standing trust between farmers and government agency staff. This occurred just at the time when, with the introduction of the Arable Area Payment Scheme (AAPS) in 1992, the scale of the finance (and potential risk) increased significantly. Farmers reported that the stakes felt high; the constant

checking of IACs forms led to feelings of being distrusted by government and this new rule-based relationship felt virtually unsupported and unsettling. Chris felt that *"With the Ministry it was a totally different relationship. ADAS were working WITH* [strong emphasis] *us! As soon as money was involved it was different. Now the queries with Defra are all about money."* As David also observed, *"the biggest change coincided with other changes to the industry. Suddenly when they* [ADAS] *were needed most, they were not there."* Winter (1997) concurs with NALMI farmers, observing that, during the 1980s and early 1990s, when support and advice was at a premium for farmers, privatisation of ADAS corroded farmers' networks of trust.

3.3 Current Relationship with Government Agencies (post 2000)

The current relationship with government (post 2000) was described by NALMI farmers as being significantly different to what NALMI farmers termed 'The Past' (i.e. 1960s to late 1980s). Interestingly, very few comments were recorded relating to a lengthy gap in the relationship during the 1990s and this is certainly a period worthy of more research. Referring to the current relationship (post 2000), farmers described both physical and social distance between themselves and government agency staff. They admitted to strong feelings of disrespect for most government agency staff and believed that farmers and government agencies now followed divergent agendas. The consequences were an absence of shared goals or solidarity in tackling mutual problems, limited information transfer or reciprocal assistance due to the absence of social networks, and an increasingly strong sense of mutual distrust which militated against risk taking. With the exception of agri-environment scheme staff, NALMI farmers believed that government agency staff working within the current system were hindering and not helping their personal transition to more sustainable land management.

Evidence for this significant change in the relationship included the inability of most NALMI farmers to name a single contact within any government agency; the use of many disrespectful and derogatory names ("*Big Brother", "Tin Pot Dictator", "Little Hitler", "the f****** Gestapo", "those bastards"*); concern at proactively ringing government agencies and particularly at revealing the farms' holding number and an increase in threats of militant action against the government. Arable contractor Nick felt strongly that *"I think the time to talk has nearly gone. The trust has gone. Farmers are becoming more militant."* Sam agreed *"Why should we accept all these changes? What we need is a better way to fight Defra!"* Mike added *"The hatred of Defra - it's nearly got to a poison."*: Alec continued *"The trust* [of Defra] *has gone entirely - it's warfare now!"*

We analysed 1934 substantive comments in which farmers evaluated their current relationships with government agencies (see Table 3). Negative comments were distinguished from positive comments (ambiguous comments were explored during the interviews to clarify negative and positive feelings). Overall, 1688 comments were negative (87.3%) and 246 comments were positive (12.7%), demonstrating a marked shift from the historical relationship with government agencies discussed above (97.4% positive and 2.6% negative). Comments were further divided into characteristics (e.g. *"They're hopeless - and they really can't be trusted*") and consequences *("I'll never be honest with them again - no way!*").

Table 3. Farmers' assessment of their current relationship with government agencies (author's survey

			Number of comments	%
NEGATIVE RESPONSES (87.3%)	**Negative characteristics**	**Physical, Social and Emotional distance**		**26.2**
		Unsuitable staff	294	
		Poor communication; no relationship	213	
		Professional and personal disrespect		**20.6**
		Unprofessional, incompetent administration	259	
		Inexperienced staff with poor understanding of farming	139	
		Policy divergence		**20.3**
		Lack of effective leadership	194	
		No credible policy direction	130	
		Double standards	68	
	Negative consequences	Negative impact on the sustainability of land management	172	**20.2**
		Worsening relationship with Government Agencies - strong mutual distrust	219	
POSITIVE RESPONSES (12.7%)	**Positive characteristics**	**Contact with Government Agency staff welcomed**		**6.9**
		Competent staff, typically RDS 'at the coal face'	120	
		Meetings to discuss Single Farm Payment helpful	14	
		Effective administration		**0.9**
		Forms simpler since 1987	13	
		Website helpful	5	
		Policy convergence		**2.4**
		Agri environment schemes supported	40	
		Policy is improving	6	
	Positive consequences	Farmers keen to work with Government Agencies	23	
		Would phone government agency for advice	20	**2.3**
		Would phone government agency if a problem on the farm	5	
		Total	**1934**	**100**

4. Consequences of Changes in Linking Social Capital

We identify three key characteristics of these changing relationships from the data: i) distance from government; ii) disrespect for government; and iii) divergence from government goals. These led to two key consequences, namely: i) falling trust; and ii) ultimately a delay in the transition to more sustainable land management. The data presented focus entirely on the farmer's perspective of the changing relationship with government agencies.

4.1 Physical and Social Distance

Physical and social distance was the most frequently cited negative characteristic of the current relationship between farmers and government agency staff (26% of all comments) and was a key finding of the HSE (2005) evaluation of stress within the farming industry in England and Wales. 25 NALMI farmers could not name a single contact in any government organisation. Greg felt that: *"The lack of trusted names is a problem. We have no names now."* Only six farmers could provide a name (five from the Rural Development Service (RDS) and one from the Environment Agency (EA)), but not all were for positive reasons. Harry, for example, was aware of EA staff as he was being prosecuted for a major pollution incident. Positive contacts included one officer helpfully checking IACs claims, and praise for RDS officers on the ground was fulsome: John describes his local Countryside Stewardship Scheme (CSS) officer. *"John Ebbage is our local Defra man in Norwich. He's a fine chap and he's on our side. He's a very good operator. At the recent ELS meeting I went to, John was there. He must have known 50 farmers by name. He had been on their farms and he knew them. That's a fantastic* [strong emphasis] *link!"* The contrast was repeatedly made between RDS staff and other parts of Defra.

NALMI farmers believed that physical and social distance was a significant barrier to both the development of trust and the effective transfer of information between farmers and government agencies. Over 200 comments indicated that farmers felt distant to government agencies because they never saw staff, they found it difficult to get through on telephone helplines and they felt the service they received was impersonal. The inability to build positive relationships was due to staff moving jobs too frequently, with farmers rarely speaking to the same person twice. Agency staff tended to speak to farmers only when they were checking up on them or when there was an issue or a problem (reported also in the Hunter Report, 2007).

Considerable suspicion of government agencies prevented many farmers asking for advice to help their transition to more sustainable land management. Paula felt it unlikely that Defra officers would come out if asked and she was concerned about their reaction if they did come. *"They won't come out to help at all. They will only come if they think that they will find something wrong. They are an invisible body - an alien force."* Nick agreed. *"We would NEVER* [very strong emphasis] *go to Defra if there was a problem on the farm. We would go to a land agent first. No one ever phones Defra if there is a problem. Defra or English Nature would never be the first port of call …. If they got wind of something……"*

Farmers were also concerned that communication with Defra felt one-way and was often inefficient, findings amplified by the ORC International survey of RDS customer satisfaction (2003; see Appendix D). Letters and reports arriving through the post were the most frequent method by which Defra communicated with farmers. The initial response to mail from Defra was a mix of uncomfortable emotions including anger, dread and guilt. Anger related to the expected content of the reports, to bureaucratic mistakes representing inefficiency and to the fact communication was all one way. As Ginny remarked : *"It's not communication because it's all one way. Communication should be two way - but we're just on the receiving end."* Dread was related to difficult tasks contained within the letters and reports. Guilt related to the farmers' expectations that, if the action was in any way elective, they were sure that they wouldn't carry out the required action, but would then feel guilty. Henry was typical in this respect: *"Piles and piles of books arrive every day and there is no time to read them. Huge volumes of material come through. The trouble is that I take it all home, but never have time to read it. It just makes me feel guilty."*

4.2 Professional Disrespect

Not all comments indicated disrespect for government agency staff. Of the 120 comments reflecting positive experiences with government agency staff, 52 referred to feelings of gratitude, 37 to respect and 31 to a variety of other aspects (e.g. that staff had been helpful). Virtually all of the positive comments about staff were directed at agri-environment field staff from the RDS who enjoyed more regular contact with farmers and had developed respectful trusting relationships. Negative comments, however, were in the majority. Just under 400 comments (20.6%) revealed farmers' feelings of professional disrespect for government agency staff. This disrespect was targeted primarily at unprofessional and incompetent administration (65%) but also inexperience dealing with farmers and poor technical knowledge of farming (35%).

4.2.1 Incompetent administration and double standards

Two distinct aspects of government agency administration were identified as problematic: incompetent administration (68%) and double standards (24%) with a further 21 (8%) positive comments. Of these 21 positive comments, 13 confirmed that some forms had improved and five suggested the Defra website was now easier to use. One farmer felt that Defra were good at sending out reports, another felt that the paperwork was helpful when keeping track of the farm business. More commonly, farmers were shocked at the low standard of administrative competence. The lack of apparent accountability angered farmers most. Adrian felt that: *"Unlike the RDS or a business, Defra don't have a customer service part to check up on the satisfaction of their clients with their efficiency."*

Eighty two comments detailed a catalogue of repeated mistakes that had been experienced by all 31 NALMI farmers. These included lost forms and maps, delays to payments, technical errors, incorrect payments and inaccurate information provided by helplines. For example, of the 221 cattle passports

issued by BCMS to NALMI farmers in 2003, 180 (81.4%) were incorrect. Oona sent in 101 passports for her dairy herd. On their return 97 were incorrect, three were missing, only 1 was correct and Oona was left *"feeling close to tears."* She felt she had *"followed the protocol to the letter, but it felt like another nail in the coffin for the cows"*

Double standards provided a significant bone of contention. Farmers felt that, whilst government agencies repeatedly made mistakes, farmers were always considered the guilty party. Government agency staff would repeatedly miss deadlines with no apparent sanction, but the consequences for farmers missing deadlines were severe. NALMI farmers had found that agency staff would deny their mistakes and were never held to account. Farmers felt they had no right of redress, and this rankled with many. The consequences of incompetent administration were financial impact on the farm business, wasted time, frustration and anxiety leading to stress, and a significant loss of trust in government agencies. The loss of professional respect created further barriers to emotional engagement with government agency staff. For the majority of farmers, anger and frustration were coupled to a deep sense of grievance and injustice. For a minority, the behaviour of staff led to unresolved feelings of hurt and emotional distancing. Disrespect was linked to the disavowal of any shared goals and thereby jeopardised the transition to more sustainable land management.

4.2.2 No knowledge of farming

Numerous circulating narratives of ignorance and incompetence were identified in the NALMI prompting, for some farmers, competitive escalation of stories of government stupidity. As a consequence, all NALMI farmers were asked to rate how much the staff who worked for government agencies (Defra, EA, English Nature) understood practical farming issues. The majority of responses (57%) revealed that farmers were unable to provide an answer because they met with staff so infrequently. Only 1% of farmers felt that agency staff knew a great deal about farming, with nearly 10% believing that they knew a reasonable amount. Most farmers (32%) who were prepared to judge, however, were of the opinion that government agency staff either knew a little (8.5%), nothing (7.5%) or very little (16%) about farming.

There were a number of policy and personal consequences of these judgements about (the lack of) farming knowledge. First, ignorance of farming discredited the policies which staff were seen to be *"peddling"* and created uncertainty amongst farmers that new policies provided credible alternatives to existing approaches to land management. Thus perceptions of risk were heightened, curbing enthusiasm for change. At the macro scale therefore, lack of staff knowledge and professional credibility hampered the transition to more sustainable land management by contributing to a lack of "Buy-In" amongst most farmers. At the personal scale, ignorance of farming harmed the relationship between farmers and government agency staff thus making further influence from the government agencies less likely to succeed. Three key areas were apparent. First, some government agency staff could pinpoint problems on the farm but were unable to offer practical or affordable

solutions. Second the lack of knowledge removed the legitimacy of regulators to regulate; farmers found attempts to change behaviour patronising because it devalued local knowledge and experience. Oona, for example, was furious when challenged about the management of her dairy herd by assurance assessors with little experience of milking. *"Over-regulation is demeaning my work and my skills. I'm being dictated to. I feel like a naughty girl - I KNOW how to look after my girls."* Fellow dairy farmer Francis felt similarly patronised by the Food Standards Agency assessor. *"We call her the librarian from Nottingham - because she knows nothing* [about farming]. *She's got too much power and too little knowledge."* Finally, farmers' reactions towards staff, which they admitted was sometimes hostile, made staff themselves insecure in the farm environment, often making them appear officious as they defended their organisation's priorities.

4.3 Falling Trust

NALMI farmers made it clear that in their experience distrust between farmers and government agency staff was increasing, a finding replicated by other studies (e.g. NAO, 2006; FCN, 2007). In total, 58 comments from NALMI farmers detailed the existence and negative consequences of this lack of trust. Policy changes were a major cause of loss of farmer's trust in government agencies. Ken, for example, feels that the introduction of arable areas payments and IACS forms had caused a significant loss of trust. *"IACS reduced trust as we were frightened to say anything to Defra. You steer clear of being open and ask yourself 'Dare I go to them?'"* The lack of trust between farmers and the government was considered to be mutual.

All 31 NALMI farmers believed that within government there exists a strong culture of mistrust of farmers. This mistrust is based on poor communication, misunderstandings and the lack of any personal relationships, as well as the 'rogues' who let down the farming industry through poor behaviour. Ken was concerned that: *"Government don't trust us any more. That's why they get us to write it all down and then they will use it against us."* David concurs: *"The scheme* [stewardship] *itself assumes that every farmer is a crook unless proved otherwise and this limits the freedom of the staff to provide freedom to farmers."* NALMI farmers believed that the lack of social networks contributed to this increasing distrust, as both cause and effect, particularly the lack of regular trust-building communication. Eddie, a small dairy farmer, acknowledged the significance of this growing social divide. In his experience, trust can only be built on personal knowledge and acquaintance. *"Defra don't know the farmers do they? So they can't trust the farmers because they don't know them. It* [trust] *has to work both ways you know."*

One of the key consequences of this growing mutual distrust was a culture of mutual blame, with neither farmers nor government agencies fully taking responsibility for the transition to more sustainable land management. A significant proportion of farmers avoided the grants and advice that were available, in part because they believed to invite officials onto the farm was to invite disaster. Wealthier farmers used land agents and agronomists to fill the

advisory shortfall, but these tended not to be used by the farmers facing the most difficult problems. Distance and self-exclusion from sources of help for the farm typified farmers with the greatest distrust of government, the lowest linking social capital and the most urgent sustainability challenges.

4.4 Delay in the Transition to more Sustainable Land Management

Farmers identified five ways in which they felt that government agencies had hampered or delayed their transition to more sustainable land management. They believed that:

i. Government had failed to make a convincing case for change. NALMI farmers were either unaware of, or chose not to believe, evidence of environmental damage caused by farmers' responses to agricultural policy in recent decades. For example, as Seymour *et al.,* (1992) discovered, policies to limit diffuse pollution were discredited due to limited evidence of the impact of nitrates on human health

ii. Government had not provided credible policy solutions to the problems faced by arable farmers. Just as Franks *et al.,* (2003) had discovered in amongst Cumbrian farmers, policy options (such as organic production) were perceived as untested and high risk

iii. Government had not sufficiently motivated farmers to want to change and farmers believed it was counterproductive to use force or coercion to change deeply entrenched attitudes;

iv. Practical information on how to change was not available from government agency staff, partly due to social distance, but also because of the limited knowledge of farming and land management displayed by agency staff. New knowledge was contested as Morris (2006) found in two large-scale surveys of agri-environment agreement holders across the UK;

v. Government agencies were unable or unwilling to provide the personal support farmers felt they needed, particularly to judge or provide feedback on progress in order to assist adaptation and maintain the farmers' motivation. Distrust deterred honesty.

Farmers also believed that agency staff did not welcome farmers using their own ingenuity and creativity to become more sustainable. For example, four farmers had instigated small steps to increase the sustainability of their land management (specifically by reducing a pollution risk). All four felt distant to government agencies and therefore had proceeded without the benefit of advice. Investment had been made and the farmers were pleased with their initiatives. Unfortunately, in all four cases, government agency staff had subsequently deemed the improvements unsuitable and had insisted on adaptation or the complete removal of the installation. Phrases including *"nasty", "dismissive"* and *"totally negative"* were all used to describe the

reaction to these small-scale and personal initiatives. According to the farmers concerned, the consequence of this response was to remove any further emotional engagement with the transition to more sustainable land management. The need for greater sensitivity to, and encouragement of, the farmers' first steps towards sustainability was noted by all four farmers.

The social aspects of sustainability were the most significantly affected by the changing relationship with government agencies. As for many farmers (HSE, 2005) stress, anxiety and depression led to suicidal thoughts for two NALMI farmers. Fear was a commonly cited emotion resulting from the poor relationship with government agencies. Bill, for example, attended a machinery club meeting to discuss the introduction of the Single Farm Payment. *"At the meeting yesterday .... It was a fearful meeting. I have never seen so much fear at a meeting. The people who made the rules don't know enough about practical farming. The jargon doesn't mean anything to the farmers. It's just a worry."*

Economic sustainability was harmed in several ways. NALMI farmers had suffered financial costs, felt their business had suffered as a consequence of government agencies actions and felt they had wasted their time. Actual costs included interest payments on delayed support payments, a widespread concern acknowledged by David Hunter (The Hunter Report, 2007). Paula was typical of the farmers citing examples whereby government agencies had lost the business money due to a delay in issuing passports for calves. *"They* [British Cattle Moverment Service - BCMS] *will withhold payment as a ransom while they are sorting things out. Their delays impact on our cash flow."* The significance of these feelings for Peter, her husband, is the considered decision to no longer be honest with government agencies. He feels that it is the inflexibility of BCMS that is causing him to lose his honesty and compromise his values. He feels uncomfortable about changing his value system to fit in, but states wryly that *"being angry helps."*

With regard to sustainable resource-use, creativity was now celebrated for its capacity to cheat the system. Ken described with glee how he foiled Assured Combinable Crops Schemes (ACCS) inspectors regarding both the signage on his chemical store and the storage of grain. *"Take the spray shed. I don't have a sign on it because I don't want people to come and nick the sprays. So I bought a sign for the inspection. Every time we have an inspection I go and put it on - and later I take it down again!"* Regarding the storage of grain in a shed known to be substandard *("Well - it's a bit mucky if I'm honest"*) Ken delayed the inspection citing family circumstances whilst he sold the grain and cleared the store. Subsequently (ACCS) inspectors visited and declared the farm to be 100% compliant. Ken was genuinely overjoyed; he described the feeling as having re-gained his self-respect in his relationship with the 'The System'.

5. Is the NALMI Unique?

In the NALMI, the relationship between farmers and government agency staff has changed from one described using phrases such as 'Folk Hero', 'Brilliant Chap', 'We all trusted him completely' to a relationship described by

a range of derogatory terms. New norms of distance, disrespect and distrust have replaced an effective working partnership with government and too often, farmers' creativity and intelligence are used to circumvent, rather than apply, regulation on their farms *("In future, I'll just burn on a foggy day!"* Terry). Moller *et al.*, (2006) describe this emotional reaction to external (and hence externalised) regulation, explaining the role of authoritarian regulation in the creation of rebellious responses amongst policy targets. With respect to externalised regulation, NALMI farmers felt a strong sense of the 'limited reach of the socio-legal gaze' described so well by Neal and Walters (2007:258). Farmers were very aware that distant government could never police their day-to-day activities in every field on every day, and perceptions of free-riding within the wider farming community reduced their incentive to obey (Pretty *et al.*, 2001). NALMI farmers also found it daunting (and ultimately unsatisfying) to approach government agency staff and they expressed negative feelings towards current policy initiatives which they perceived as irrelevant and risky (particularly the transition to 'post-productivist' land management where resistance was also seen amongst large-scale commercial farmers in South-East England by Walford, 2002, 2003).

We conclude, therefore, that the relationship between the majority of NALMI farmers and the UK government in the period 1999-2004 is dominated by 'Farmer-Buy-Out' (hereafter 'Buy-Out'). 'Buy-Out' is here defined as farmers' deeply internalised hostility to the government's governance of agricultural and rural policies. 'Buy-Out' results from (and subsequently increases) physical, social and emotional distance between the farmer and government agencies. It is characterised by professional disrespect for the standards of service received and, as a consequence, results in agendas for the farm that diverge from government policy. The significance of 'Buy-Out' in the NALMI prompts the question "is the NALMI unique?' or may the conclusions of this relatively small-scale study be more widely generalised?

Numerous studies (e.g. ORC International 2003; HSE, 2005; Lobley *et al.,* 2005; NAO, 2006; FCN, 2007; Dwyer *et al.*, 2007) conducted at the same time as the NALMI and engaging farmers from all over the UK, all provide strikingly similar results, suggesting that the NALMI is not unique in its findings. Low social capital between farmers and government has been widely observed throughout the UK over the last 5-10 years, particularly with respect to social proximity, levels of respect and farmer's 'Buy-In' to post-productivist policies (Lobley *et al,.* 2000; Franks *et al.,* 2003; Walford, 2002; CA, 2006). Physical, social and emotional distance was described by the Better Regulations Task Force (2000) who found poor communication and social distance were commonplace (Falconer, 2000 and Dwyer *et al.*, 2007 reach similar conclusions). The HSE investigation into farming related stress (2005) found government agencies made 'no attempt to understand farmers' role' or 'establish a dialogue' with them. The rural stress review, conducted by Lobley *et al.*, in 2004 concludes from an extensive literature search and the engagement of key practitioners throughout the UK that agricultural policy is now a major stressor for farmers. Hostile interactions between farmers and government agency staff were found to erode linking social capital and visits

by the RPA were experienced as 'positively threatening' (Hunter Report, 2007: 34; see also the FCN, 2007 investigation into the impact of RPA visits to farmers). Prolonged uncertainty has produced a mindset amongst many farmers that is "not conducive to business restructuring and adaptation" (Lobley *et al*., 2005: viii), in which feelings of distrust and farmer's loss of self-efficacy block progress towards the government's vision for farming (see also Cast and Burke, 2002; Hewitt, 2003; HSE, 2005).

6. Options for the UK Government

Winter (1997) considers that the challenge posed by a transformation to more sustainable land management is potentially more taxing than those facilitated by NAAS and ADAS. This second transition requires additional skills and knowledge (Pretty *et al.,* 2005; Ingram and Morris, 2007), a more heartfelt internalisation of policy goals (Burton, 2004; Pretty and Smith, 2004; Stobbelaar *et al.,* 2008 in press) and deeper, trusting, cooperation with government than previous policy responses. Farmers' relationships with (and particularly their trust of) institutions therefore assume greater importance (see also discussions provided by Renting and Van Der Ploeg, 2001; Dessein and Nevens, 2007). The timescales for change are unhelpful in this respect, for the UK government requires rapid obedience to major policy challenges. The successful introduction of European Directives (e.g. Water Framework Directive, 2000) demand rapid changes to farmer behaviour, both seen and unseen, to meet outcome based targets (BRTF, 2000; Defra, 2006b).

The UK government is aware that farmers present challenging policy targets for whom regulatory coercion is ineffective, expensive and unpopular (HMG, 2005; Defra, 2006b). Repeated calls for a partnership approach when working with farmers have therefore been made (HMT, 2006). But the evidence from these NALMI farms suggests the existence of a significant 'Rhetoric:Reality' gap between statements of partnership working contained in strategic documents and the resources devoted to building trusting professional partnerships between farmers and government agency staff.

If ignored, the consequences of this Rhetoric:Reality gap are serious. Further erosion of linking social capital may increase the mutual distrust and negative stereotyping that widens social distance between farmers and the State (van Woerkum and Aarts, 1998; Renting and Van Der Ploeg, 2001). The spill-over effects of regulation, described so well by Davies and Hodge (2006), might increase the potential for antagonism and covert non-compliance. The polarisation of farmers could lead to the development of an underclass of excluded (and self-excluded) farmers (suggested by Lobley *et al.,* 2004) who contribute to the UK's failure to meet EU Directives. We conclude that the UK government should acknowledge and further research the implementation deficit that 'Buy-Out' represents. The institutional failures identified (at all levels) should then be addressed through institutional reform.

The content of numerous studies, including many sponsored by government departments (e.g. Lobley *et al.*, 2004; HSE, 2005, NAO, 2006), suggest a more detailed examination of the causes and consequences of policy 'Buy-Out' is overdue. Dwyer *et al.,* (2007) provide a comprehensive and

incisive start to this process. Government must, however, respond to the messages contained in these reports, moving more rapidly to the (ultimately political) solutions to the issues they examine. Transparency in researching policy failure is almost always politically challenging; institutional failure is often underplayed (see Winter, 1996; Siebert *et al*., 2006). 'Self-referencing' approaches to research by government may exclude, rationalise or even edit-out, voices from outside the policy system that challenge the status-quo (van Woerkum and Aarts, 1998:274). Government is encouraged therefore to direct researchers *towards* conflict, particularly to the related topics of 'Buy-Out', self exclusion and polarisation (Röling, 1985; Kleijn and Sutherland, 2003).

The results of the NALMI suggest that institutional reform should prioritise the restoration of long-term trusting professional relationships to facilitate changes in land management, just as they did from the 1950s to the late 1970s. The transition to more sustainable land management is such a challenging and personal transformation, it can only be accomplished through challenging and trusting new relationships between equals (Winter, 1997; Pretty and Smith, 2004) provided by investment in social capital as a public good (Pretty and Ward, 2001).

7. Conclusions

In conclusion, we believe that the UK government genuinely wishes to see sustainable and self-supporting farmers capable of commercial success within the current regulatory framework and who also provide public benefits on behalf of the taxpayer. To achieve this, government is seeking significant behavioural change from farmers. As Evans (1996) explains, the limiting factors to sustainable development are, however, often located in government and institutions, rather than in individuals and civil society. In the UK, the government should be the lead partner in this transition. It is responsible for the strategic development of society; it is a signatory to international sustainable development strategies and it wields the power and resources necessary for change. It has responsibilities of inclusive leadership which are clearly underpinned by its own strategies for rural areas (e.g. Defra, 2004 & 2006a). The term 'governance', frequently used in these strategies (particularly HMG, 2005) should not simply be a rhetorical tool. Just like sustainable land management, it should be seen as a series of active, daily, unseen personal choices made not just by policy makers but by every person working as a link in the chain of delivery.

In its 'Working For The Essentials of Life', Defra indicated an ambition to be "a world-class government department that is respected, professional and outward looking" (Defra, 2002:3). This publication also states clearly *"We aim to answer to the communities we serve and welcome feedback on our performance"* (Defra, 2002:35). The NALMI research provides feedback. The NALMI has found a striking degree of physical and social distance, professional disrespect, divergent agendas and distrust between government delivery agencies and farmers, findings that are clearly revealed by many of the government's own investigations. These institutional failings hinder and delay farmers' personal transition to sustainability (O'Riordan and Voisey,

1998; Stoll-Kleeman and O'Riordan, 2002) and thence to more sustainable land management.

Not all farmers are similarly affected, as social capital varies significantly between individuals. For those farmers with personal resources of linking social capital (particularly trusted contacts within government agencies), and the self-confidence to approach government organisations proactively, the relationship can be made to work (see Röling, 1985). These most-sustainable farmers successfully access the information and resources to make them even more sustainable (Bruckmeier and Teherani-Krönner, 1992; Sealy and Warren, 1994). But for those farmers with fewer social resources, who form a largely self-excluded underclass, the transition to more sustainable land management is hazardous and stressful. Succession rates on these least-sustainable farms in the NALMI are surprisingly high, certainly higher than the recent study by Uchiyama *et al.,* (2007). 78% of the least-sustainable NALMI farmers have successors covering 93% of their land (for more details see Hall, 2008). The individuals concerned will not leave farming before they have endured significant self-harm, a characteristic of farmers described by Lobley *et al.,* (2000). Government policy, as delivered today, does not help these excluded farmers in ways that meet their needs, and therefore government policy must change. Rebuilding linking social capital is an important part of the institutional reform required to ensure that farmers and government together build the collective capacity to succeed in the transition to more sustainable land management.

References

ADAS, 2007. Farmers' Intentions in the Context of CAP Reform in England – Analysis of ADAS Farmers' Voice 2007 Survey Final Report

BRTF (Better Regulations Task Force). 2000. Better Regulations Task Force: Environmental Regulations and Farmers. November 2000. ISBN 0 7115 0403 2

Bruckmeier K and Teherani-Krönner P. 1992. Farmers and Environmental Regulation. *Sociologia Ruralis* Vol XXXII pp 66-81

Burton, J F. 2004. Reconceptualising the 'behavioural approach' in agricultural studies: a socio-psychological perspective. *Journal of Rural Studies* 20 359-371
Burton R J F and Wilson G A. 2006. Injecting Social Psychology Theory into Conceptualisations of Agricultural Agency: Towards a Post-Productivist Farmer Self Identity? *Journal of Rural Studies* Vol 22 pp 95-115

Campbell C, Wood R and Kelly M. 1999. Social Capital and Health. Report produced for the Health Education Authority by the London School of Economics and the Health Education Authority. ISBN 0 7521 1659 2

Carter E S. 1978. The Effective Communication of Research Results into Agricultural Practice: the role of Agricultural Development and Advisory Services. *Agricultural Progress* Vol 53 pp 29-33

Cast A D and Burke P J. 2002. A Theory of Self Esteem. *Social Forces* Vol 80 (3) pp 1041-1068

CA (Countryside Agency). 2002. Land Management Initiatives. Countryside Agency Report CAX 2. Available from www.naturalengland.org.uk

CA (Countryside Agency). 2006. Agricultural Landscapes: 33 Years of Change. Report carried out by Westmacott R and Worthington T for the Countryside Agency. July 2006. CA 220

Cuddeford V, Langer J, Lucyk C and MacRae R. 2004. Advanced Environmental Farm Planning in Canada: Thoughts on Concepts, Tools and Implementation. *World Wildlife Fund Report*. March 31st 2004.

Davies B B and Hodge I D. 2006. Farmers' Preferences for New Environmental Policy Instruments: Determining the Acceptability of Cross Compliance for Biodiversity Benefits. *Journal of Agricultural Economics* Vol 57 (3) pp 393-414

Defra, 2002. Working for the Essentials of Life. PB 6740 April 2002 www.defra.gov.uk

Defra, 2003. Our Strategy 2003 - 2006. Crown Copyright PB 7981.

Defra, 2004. Rural Strategy. 2004 PB 9728 www.defra.gov.uk

Defra, 2006a. Sustainable Farming and Food Strategy: Forward Look. July 2006. www.defra.gov.uk/farm/policy/sustain

Defra, 2006b. The Defra Simplification Plan: Maximising Outcomes, Minimising Burdens. November 2006. www.defra.gov.uk PB 12269

Dessein J and Nevens F. 2007. 'I'm Sad To Be Glad'. An Analysis of Farmers' Pride in Flanders. *Sociologia Ruralis* Vol 47 No 3 pp 273-292

De Ulzurrun L M D. 2002. Associational Membership and Social Capital in Comparative Perspective: A Note of the Problems of Measurement. *Politics and Society* Vol 30 No 3 pp 497-523

Dexter K. 1976. The Advisory and Education Role in UK Food Production. *Agricultural Progress* Vol 51 pp 1-7

Dobbs T L and Pretty J N. 2001. The United Kingdom's Experience with Agri-Environmental Stewardship Schemes: Lessons and Issues for the United States and Europe. *University of Essex Occasional Paper 2000-1*

Dobbs, T L and Pretty J N. 2004. Agri-Environmental Stewardship Schemes and 'Multifunctionality'. *Review of Agricultural Economics.* Vol 26, No 2 pp 220-237

Dwyer J, Mills J, Ingram J, Taylor J, Burton R, Blackstock K, Slee B, Brown K, Schwarz G, Mathews K and Dilley R. 2007. Understanding and influencing

positive behavioural change in farmers and land managers – a project for Defra. Final Report 30th November 2007.

Evans P. 1996. Government Action, Social Capital and Development: Reviewing the Evidence on Synergy. *World Development* Vol 24 No 6 pp 1119-1132

Falconer K. 2000. Farm-level constraints on agri-environmental scheme participation: a transactional perspective. *Journal of Rural Studies* 16, 379 - 394

FCN (Farm Crisis Network), 2007. Experiencing the Inspections: A Report by Farm Crisis Network on the impact of inspection on farmers' stress in Wales. www.fcn.org.uk

Fine B. 2007. Eleven Hypotheses on the Conceptual History of Social Capital. *Political Theory* Vol 35 No 1 pp 47-53

Franks J, Lowe P, Phillipson J and Scott C. 2003. The impact of foot and mouth disease on farm businesses in Cumbria. *Land Use Policy* Vol 20 pp 159 - 168

Gasson, R. 1973. Goals and Values of farmers. *Journal of Agricultural Economics*. Vol 24 No 3 pp 521 - 537

Glaser B G and Strauss A L. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Aldine, Chicago

Grootaert C and Van Bastelaer T. 2002. *Understanding and Measuring Social Capital: A Multidisciplinary Tool for Practitioners. Directions in Development*. The World Bank.

Hall J. 2008. *PhD Thesis.* The Role of Social Capital in Farmers' Transition to more Sustainable Land Management. University of Essex. (Publication due in November 2008)

HSE (Health and Safety Executive). 2005. Farmers, Farm Workers and Work-Related Stress. Research Report 362 Prepared by Policy Studies Institute for the Health and Safety Executive

Hewitt J P. 2003. *The Self and Its Social Setting*. Chapter 3. Self and Society: A Symbolic Interactionist Social Psychology. Ninth Edition. Pearson Education, Inc. New Jersey, USA

HMG (Her Majesty's Government), 2005. Securing the Future: The UK Government Sustainable Development Strategy. March 2005. CM 6467.

HMT (Her Majesty's Treasury). 2006. Implementing Hampton: From Enforcement to Compliance. Report produced jointly by HM Treasury, the Better Regulation Executive and the Cabinet Office. November 2006. PU085. ISBN -10: 1-84532-220-7

Hunter 2007. Defra Review of the Rural Payments Agency. Report by David Hunter. www.defra.gov.uk

Ingram J and Morris C. 2007. The Knowledge Challenge within the transition towards Sustainable Soil Management: An analysis of Agricultural Advisors in England. *Land Use Policy* Vol 24 pp 100-117

Jones W E. 1965. The Future Role of the National Advisory Service. *Agricultural Progress* XL. pp 7-9

Keenan P. 1966. Courses in Advisory Methods. *Agricultural Progress*. Vol XLI pp 121 - 129

Kleijn D and Sutherland W J. 2003. How effective are European agri-environment schemes in conserving and promoting biodiversity? *Journal of Applied Ecology* Vol 40 pp 947 - 969

Lobley M, Cowen H, Shepherd D, Whitehead I, Winter H and Winter M. 2000. CAP Reform As It Affects Land Management in the South West Forest. Report produced by University of Plymouth for the Countryside Agency. Final Report. Vol 1

Lobley M, Johnson G, Reed M, Winter M and Little J. 2004. Rural Stress Review. Research Report No: 7. University of Exeter. ISBN 1 870558 79 0

Lobley M, Potter C, Butler A, Whitehead I and Millard N. 2005. The Wider Social Impacts of Changes in the Structure of Agricultural Businesses. Research Report commissioned by Defra. University of Exeter Centre for Rural Research in association with Imperial College London, The University of Plymouth and Bruton Knowles. ISBN 1 870558 91

Lyon F. 2000. Trust, Networks and Norms: The Creation of Social Capital in Agricultural Economies in Ghana. *World Development* Vol 28 (4) pp. 663-681

Moller A C, Ryan R M and Deci E L. 2006. Self-Determination Theory and Public Policy: Improving the Quality of Consumer Decisions without using Coercion. *American Marketing Association* Vol 25 (1) pp 104-116

Morris C. 2006. Negotiating the boundary between state-led and farmer approaches to knowing nature: An analysis of UK agri-environment schemes. *Geoforum* Vol 37 pp 113-127

Morris J, Mills J and Crawford I. M. 2000. Promoting farmer uptake of agri-environment schemes: the Countryside Stewardship Arable Options Scheme. *Land Use Policy*. Vol 17. pp 241 - 254

Morris C and Potter C. 1995. Recruiting the New Conservationists: Farmer's Adoption of Agri-environmental Schemes in the UK. *Journal of Rural Studies* 11 (1) pp 51 - 63.

NAO (National Audit Office). 2006. Department for Environment, Food and Rural Affairs and Rural Payments Agency: The Delays in Administering the 2005 Single Payment Scheme in England. HC 1631. Session 2005-2006 18th October 2006

Natural England, 2008. State of the Natural Environment. May 2008 www.naturalengland.org.uk

Neal S and Walters S. 2007. 'You can get away with loads because there's no one here': Discourses of regulation and non-regulation in English rural spaces. *Geoforum* Vol 38 pp 252-263

NESF (National Economic and Social Forum). 2003. The Policy Implications of Social Capital. The National Economic and Social Forum Report No 28. May 2003.

Newby H. 1987. *Country Life: A Social History of Rural England*. Weidenfeld and Nicolson Ltd.

O'Riordan T and Voisey H. 1998. Continuing the Transition. Chapter 16 pp 276-281 In *The Transition to Sustainability: The Politics of Agenda 21 in Europe.* Edited by T O'Riordan and H Voisey. Earthscan Publications Ltd, London

ORC International. 2003. Rural Development Service: Customer Satisfaction Survey 2003. Final Report. Prepared by

ORC International; Submitted to COI Communications. September 2003.

Ostrom E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action.* Cambridge University Press, Cambridge, UK

Pretty J. 2005. Social Capital and the Collective Management of Resources. pp 173 - 178 in *The Earthscan Reader in Sustainable Agriculture.* Edited by J Pretty. Earthscan, London

Pretty J, Brett C, Gee D, Hine R, Mason C, Morison J, Rayment M, Van der Bijl G and Dobbs T. 2001. Policy Challenges and Priorities for Internalizing the Externalities of Modern Agriculture. *Journal of Environmental Planning and Management* Vol 44 (2) pp 263-283

Pretty J, Morison J and Hine R. 2005. Reducing Food Poverty by Increasing Agricultural Sustainability in Developing Countries. pp 375 - 398. *The Earthscan Reader in Sustainable Agriculture*. Edited by J Pretty. Earthscan, London

Pretty J and Smith D. 2004. Social Capital in Biodiversity Conservation and Management. *Conservation Biology*. Vol 18 (3) pp 631-638

Pretty J and Ward H. 2001. Social Capital and the Environment. *World Development* Vol 29 (2) pp 209-227

Renting H and Van Der Ploeg J D. 2001. Reconnecting Nature, Farming and Society: Environmental Cooperatives in the Netherlands as Institutional Arrangements for Creating Coherence. *Journal of Environmental Policy and Planning* Vol 3 pp 85-101

Röling N. 1985. Extension Science: Increasingly Preoccupied with Knowledge Systems. *Sociologia Ruralis* Vol 25 (3/4) pp 269 - 298

Rothstein B. 2000. Trust, Social Dilemmas and Collective Memories. *Journal of Theoretical Politics* Vol 12 (4) pp 477-501

Sealy M and Warren M F. 1994. Financial Management Practices on Farms. *Farm Management* Vol 8 (9) pp 413-422

Seymour S, Cox G and Lowe P. 1992. Nitrates in Water: The Politics of the 'Polluter Pays Principle'. *Sociologica Ruralis.* Vol XXXII (1) pp 82-103

Sheail J. 1995. Nature Protection, Ecologists and the Farming Context: a U.K. Historical Context. *Journal of Rural Studies* Vol 11. (1) 79 - 88.

Siebert R, Toogood M and Knierim A. 2006. Factors Affecting European Farmers' Participation in Biodiversity Policies. *Sociologia Ruralis*. Vol 46 (4) pp 318 - 340

Silverman D. 2005. *Doing Qualitative Research*. Second Edition. Sage Publications Ltd, London

Stevenson R. 1969. Training in Communication. *Agricultural Progress* Vol XLIV pp 166-169

Stobbelaar D J, Groot JCJ, Bishop C, Hall J and Pretty J. 2008. Internalisation of agri-environmental policies and the role of institutions. Journal of Environmental Management – in press

Stoll-Kleeman S and O'Riordan T. 2002. Enhancing Biodiversity and Humanity. Chapter 13. In *Biodiversity, Sustainability and Human Communities: Protecting beyond the Protected.* Edited by T O'Riordan and S Stoll-Kleeman, Cambridge University Press, Cambridge. UK

Svendsen G L H. 2006. Studying Social Capital *in situ*: A Qualitative Approach. *Theory and Society* Vol 35 (1) pp 39-70

Uchiyama T, Lobley M, Errington A and Yanagimura S. 2007. Sustaining the family farm: Dimensions of intergenerational farm business transfers in Canada, England, USA and Japan. CRPR Working Paper 5.

Van Woerkum C and Aarts N. 1998. Communication between farmers and government over nature: a new approach to policy development. In *Facilitating Sustainable Agriculture*. Edited by N G Röling and W A E Wagemakers. Cambridge University Press, Cambridge. UK

Walford N. 2002. Agricultural Adjustment: Adoption of and Adaptation to Policy Reform Measures by Large-Scale Commercial Farmers. Land Use Policy Vol 19 pp 243-257

Walford N. 2003. Productivism is allegedly dead, long live productivism. Evidence of continued productivist attitudes and decision-making in South-East England. *Journal of Rural Studies* Vol 19 pp 491-502

Ward N and Lowe P. 1994. Shifting Values in Agriculture: the Farm Family and Pollution Regulation. *Journal of Rural Studies* Vol 10 (2) pp 173-184

Water Framework Directive. 2000. Directive 2000/60/EC of 23rd October 2000 (see http://www.euwfd.com/)

Wilson G A and Hart K. 2000. Financial Imperative or Conservation Concern? EU Farmers' Motivations for Participation in Voluntary Agri-environmental Schemes. *Environment and Planning* Vol 32 pp 2161-2185.

Winter M. 1996. *Rural Politics: Policies for agriculture, forestry and the environment*. Routledge, London

Winter M. 1997. New Policies and New Skills: Agricultural Change and Technology Transfer. *Sociologia Ruralis* Vol 37 (3) pp 363 - 381

Woolcock, M. 1998. Social capital and economic development: Towards a theoretical synthesis and policy framework. *Theory and Society* Vol 27 151 - 208.

Woolcock, 2001. The Place of Social Capital in Understanding Social and Economic Outcomes. ISUMA. *Canadian Journal of Policy Research* Vol 2 pp 11-17

World Bank. 1998. The Initiative on Defining, Monitoring and Measuring Social Capital. World Bank Social Capital Initiative. Working Paper No 1. www.worldbank.org

Young J A. 1963. A Critical Look at Advisory Work. Agricultural Progress. Vol XXXVIII pp 106 – 111

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