

**Sustaining agricultural in Australia and Norway:
A multifunctional approach**

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Summary

Ideals of a productivist agriculture in the western world have faded as the unintended consequences of intensive agriculture and pastoralism have led to environmental problems. In Norway and Australia, there has been an increasing acceptance of the equal importance of social and environmental sustainability as well as economic sustainability. Alongside this shift is a belief that primary production needs to move away from an intensive, productivist-based agriculture to one that may be defined as post-productivist. In this paper, we argue that the dualism of productivism and post-productivism is too simplistic and discuss whether multifunctionalism is a better way of conceptualising rural primary production at two extreme points of the scale, the market-oriented, liberalistic Australian agriculture and the market protected small-scale Norwegian agriculture.

Key words Norway Australia comparative analysis multifunctionality post-productivism sustainability

Introduction: Productivism, post-productivism and multifunctionality as conceptual tools

This paper examines the inter-related issues of productivism, post-productivism and multifunctionality in agricultural and pastoral production. Research into these agricultural regimes is well established in Europe with geographers and rural sociologists taking up the challenge to conceptualise current modes of agriculture and rural land use. In his paper on productivism and post-productivism, Wilson (2001) highlights the fact that there has been a tendency for much of the writing in this area to be 'UK-centric' – and this certainly does seem to be the case. However, the quality of the work coming out of the Europe and Norway in particular has provided a platform for the analysis of the status of rural production elsewhere. To date, there have only been a few instances of Australian rural researchers using the concepts of post-productivism and multifunctionality to assess the effects of the broader paradigm shift towards green thinking.

In this paper, we use the conceptual frameworks of productivism, post-productivism and multifunctionality to address the current and future directions of agriculture and pastoralism in both Norway and Australia. We argue that Norway as a nation has already advanced its understanding of post-productivism, and more specifically, multifunctionality, and has embedded such notions into its agricultural policy and practices. In Australia, however, we argue that whilst there is some evidence of moves away from productivism at the ideological and policy levels, primary producers as 'agricultural actors' have not necessarily embraced this way of thinking.

Before delving into this topic, it is necessary to attend to some definitional problems – what meanings are the concepts productivism, post-productivism and multifunctionality intended to convey? The aim of this paper is not to give 'the right' answer but to focus upon what is happening within agricultural production, and whether these terms hold value in understanding Norwegian and Australian agriculture and the complexities of environmental degradation related to the production of agricultural commodities. In particular, it is questioned whether post-productivism and/or multifunctionality moves from ideology to a practice at the farm level. Are these terms concepts, theories, ideologies, regimes, discourses, processes or policy tools? Can such reconceptualisations of agricultural policy and production hold any value for Australia and Norway, which to different degrees are experiencing crisis of rural decline, reduced agricultural profitability and environmental degradation?

Productivism

With the benefit of hindsight, now that a number of decades of productivist agriculture have been experienced, productivism is perhaps the easiest of the three concepts to define. It refers to a mode of agriculture that is input intensive and where emphasis is placed on the maximisation of the production of commodities (Wilson 2001; Burton 2004). The ideology behind productivism precedes the Second World War but greater intensification of production can be traced to war efforts to increase production and secure food for war-torn nations (Argent 2002; Burton 2004). Productivism describes not only the style of agriculture, but the level to which a nation's government supports production through subsidisation, price guarantees and protectionist policies (Argent 2002; Gray and Lawrence 2001). Following concerns about underfed 'western' nations during the Second

World War, the policies of subsidisation and agricultural protectionism were so 'successful' that the European Union and other Western countries were later faced with an over-supply of commodities (Walford 2003). These products were often withheld from markets to prevent prices from plummeting, resulting in the 'butter mountains' and 'milk lakes' that epitomise the surplus production of many advanced capitalist nations in the 70s and 80s.

The intensified form of rural production requires an ever-increasing application of inputs such as agri-chemicals, machinery and Fordist-type management practices which reduces labour inputs and locks producers into a treadmill of production that is geared toward increases of production and profit (Gray and Lawrence 2001). At the same time markets are flooded with surplus commodities, reducing prices for all those economies that no longer rely on protectionist policies, such as Australia. This acts as an incentive to produce more to maintain profit margins, and therefore the economic viability of the family farm (Gray and Lawrence 2001). It is rational to suspect that this increased exploitation of natural resources, coupled with the necessity to increase inputs such as agri-chemicals has had a detrimental effect on the environment.

Overall, the productivist regime can be characterised with a set of key dimensions set up by Wilson (2001, 80); within productivism, agriculture holds a strong *ideological* position in society; there is a strong connection or cooperation between agricultural *actors*; the *food regime* is Fordist; the *agricultural production* is industrialised and specialised; strong government support for production, property rights and protectionism marks the *agricultural policy*.

Post-productivism

The farming crisis of the 1980s, which saw high commodity costs, agricultural overproduction and environmental degradation, facilitated several new measures to reverse the negative effects of productivist-style agriculture (Walford 2003). Policy makers in the EU countries and Norway reformed the Common Agricultural policy (CAP) with the intention of reducing agricultural production, budgetary costs and environmental problems associated with intensified agriculture (Walford 2003). Policy reform measures are characterized as having gone through a transition from a 'productivist' to 'post-productivist' era (Walford 2003, Wilson 2001), however, as 'productivist' is so easily defined, the term or content of 'post-productivism' is accordingly difficult.

'Post'-productivism implies a regime that has occurred after productivism and is often offered as a critique of intensification of primary production and its detrimental effects on rural society and the environment. Additionally, the consequences of intensified agriculture on the countryside, the changing landscape and environmental issues caused by agricultural pollution has brought about a different view of farmers as 'destroyers' rather than 'stewards of the land' (Wilson 2001, 82). With this change, the rural is increasingly separated from agriculture with new groups and interests gaining ideological ascendancy, from the consumption of agricultural products to consumption and preservation of the countryside and the biodiversity held within it.

As with the productivist regime, a post-productivist regime also contains a set of dimensions. Wilson (2001, 82), in his extensive review of literature on post-productivism

found that; agricultural production or the food regime has moved into a free-market, a liberalised world market that is critical of protectionist policies. Within agricultural production a new emphasis is laid on consumer demands; diversification, pluriactivity and extensification. At the same time, the state reduces support for production but offers some financial assistance or incentives for activities that help sustain the environment or reverse environmental degradation. As such, agricultural policy has widened to incorporate the interests of other actors, such as green groups. This has also implied a weakening of the relationship between the farm lobby and agriculture ministries.

Multifunctional agriculture

The state retreat from financial support of agriculture has been accompanied by *increased* regulation of agricultural practices and through voluntary agri-environmental policies that encourage conservation practices and the enhancement of local planning control. The popularity of (neo) liberal policies in western countries, with their emphasis on global trade in a de-regulated market has unintentionally contributed to a further intensification and concentration of the food-chain (Burch and Rickson 2001; Campbell and Lawrence 2003; Lawrence 1987) and many land holders in Australia are aiming to intensify their production through further clearing or the purchase of additional land (Richards et al 2003). It is within this contradictory manifestation that productivism and what has been referred to as post-productivism are occurring at the same time. In recognition of this dilemma of terminology, Wilson (2001, 95) posits the phrase ‘multifunctional agricultural regime’, a term which acknowledges the complexity of agricultural modes of production that may be occurring at different spatial and temporal localities. Used in this way, he argues, post-productivism is useful in describing the ‘transition’ from one mode to the other, whereas,

...the notion of a multifunctional agricultural regime allows for multidimensional coexistence of productivist and post-productivist action and thought and may, therefore, be a more accurate depiction of the multi-layered nature of rural and agricultural change (Wilson 2001, 95).

Some use post-productivism and multifunctional interchangeably. The dualism of productivism and post-productivism might be too simplistic a way of conceptualising rural primary production, but does ‘multifunctionalism’ represent something different, or as Wilson (2001) puts it ‘beyond’ post-productivism? This argument stems from research, or rather a lack of research, showing evidence of a post-productivist reorientation at the farm level. As extensification and diversification of production has occurred in many regions of advanced economies, there are also signs that production has intensified alongside this (Wilson 2001, 83).

The term ‘multifunctionalism’ or multifunctional agriculture might be seen as a policy or regime within, beside or beyond post-productivism as it includes several functions of agriculture in addition to its primary role which has been mainly understood as producing food and fibre. According to Tilzey (2003, 1) agricultural multifunctionality is a concept that seeks to capture the multiple benefits and services agricultural systems should benefit human and non-human nature alike. These functions can include agriculture’s contribution

to cultural heritage, environmental protection and communities. Tilzey (2003) views agricultural multifunctionality in two senses; as 'reality' and as a 'discourse'. The first refers to the practical performance of agricultural activity, the latter to the policy.

At the level of world trade in agriculture, the term multifunctionality has referred specifically to the 'public good' relating to the non-tradable concerns of agriculture. Countries reliant on exports such as Australia have strongly opposed the World Trade Organisation's (WTO) 'green light' on domestic subsidies and border protection as they are claimed to distort markets (Parliament of Australia, 2001). However, does this exclude exporting countries to practice multifunctionality outside of WTO agreements? It is suggested in this paper that multifunctionality deserves a broader conceptualisation and should not be measured only in terms of its use by the WTO. Indeed, nations outside of the WTO may still strive for a multifunctional agriculture.

As noted throughout this paper, Wilson (2001) stands as one of the key architects in introducing multifunctional agricultural regimes as a preferable term for conceptualising changes in contemporary agriculture and rural societies, arguing that 'post-productivism', indicates something that occurs 'after' productivism that is also different to it. Although Wilson's understanding of multifunctional agriculture is well argued, his assertion that "...just as the post-productivist transition may only occur in societies that have gone through the PAR [productivist agricultural regime], so the multifunctional agricultural regime may only occur in societies that have gone through the post-productivist transition" is contestable (2001, 95). Claiming a 'post-productivist' transition for multifunctional praxis is in our view narrowing rather than opening up the debate for analysis and understanding changes outside of a UK- or Eurocentric point of view and situation.

As a point of departure, lining up the concepts of 'productivism', 'post-productivism' and 'multifunctional agriculture' beside each other, seeing the possibility of finding all three 'regimes' or modes occurring at the same time, dependent or independent from each other, the present agricultural and pastoral modes at two extreme points of a scale, the market-oriented, liberalistic Australian agriculture and the market protected small-scale Norwegian agriculture will be discussed. In doing this, an evaluation can be made regarding the emerging agriculture land use in both Norway and Australia and whether post-productivism or multifunctionality has moved from an ideology or philosophy to a practice at the farm level.

Geographical characteristics and agricultural production in Norway and Australia

The value of concepts such as post-productivism and multifunctionality will be ascertained through the grounding of these conceptual frameworks within the agricultural format of both Norway and Australia. These two countries are both advanced capitalist nations yet have conceived of the relational role of agricultural production and society in quite different ways. Before embarking on this exercise, it is important to consider the contextual backdrops of each nation by describing the key geographical and agricultural characteristics.

In Australia, agricultural production was introduced to the Australian landscape through a process of colonisation. Prior to the invasion of Australia, Aboriginal people had managed the land through a system of 'firestick farming', which involved cycles of burning and regeneration. The original inhabitants were later systemically dispossessed of their lands and in many cases killed by 'new settlers' and the colonial government (often euphemistically referred to as 'dispersal'). The European settlers brought with them a system of agriculture that had evolved over time to suit a wet and fertile landscape, rather than the arid and semi-arid landscape of Australia. Rather than adapt their styles of farming and pastoral production, the new settlers set about dominating the landscape to suit their purposes (see Barr and Cary 1992; Gasteyer and Flora 2000; Gray and Lawrence 2001). This later involved the 'opening' of new lands for production by clearing the trees then, following World War II, progressing to more intensive forms of production, using irrigation, chemical fertilisers and broadscale clearing.

Despite its vast size, Australia is arguably one of the world's most urbanised nations with around 80% of Australians living within 50 kilometres of the coast (Bourke and Lockie 2001). In rural areas, 99.6 percent of broadacre and dairy farms are traditional family farms although the number of corporate farms is growing, particularly in the beef and cotton industries (Gray and Lawrence 2001). Over the last twenty-five years, the number of farms has declined by 25 percent, leaving only relatively small or large farms (Gray and Lawrence 2001). This has been facilitated by the 'get big or get out' rural restructuring of agriculture, whereby larger properties and increased outputs are needed to compete with global commodity prices.

Given the scale of the Australian continent, property size can be small on urban fringes or thousands of square kilometres in remote, beef cattle areas. In many remote areas, land is marginal, soils are poor and rainfall is infrequent. Hence pastoral properties span great distances in order to be economically viable. Clearing of vegetation and overgrazing, coupled with long periods of dry weather has the potential to cause the desertification of large tracts of the Australian landscape. Pastoralism accounts for 60 percent of Australia's total land use (Commonwealth of Australia 2002). Due to the climatic variability, shifting commodity prices and, in some cases, high debt level, graziers tend to adopt a low risk strategy, which reinforces productivist-style management practices.

As the rural population is decreasing, those who have remained in agriculture and pastoralism increasingly find themselves on a treadmill of production. This necessitates increased inputs such as agri-chemicals, and hence costs, which in turn has a negative effect on farm viability and environmental sustainability. Broadscale tree clearing is a prime example of the ever-increasing need to obtain more land for production. Ironically, on the other side of the world, a lack of agricultural activity and grazing animals is causing Norway to become a forest, which is seen largely as an environmental problem.

Farms in Australia have traditionally been family businesses, in ownership as well as operation, passed on to successive generations (Australian Bureau of Statistics 2003a; Garnaut and Lim-Applegate 1998). More than 90 percent of Australian farms are run by families (Alston 1995). Almost all farms consist of husband and wife, many in partnership. Family farms are economic and kinship units, often involving two generations and sometimes brother partnerships. At an Australian farm, the owner manager of the farm

business holds ownership and has the primary decisions making position in the business (Garnaut and Lim-Applegate 1998).

As with Australian farming, Norwegian farms are mainly family farms. The Norwegian farm household normally consists of one 'owner manager' and his or her spouse. This is the case on 85 percent of the farms (Rye et al 2002). At present, around 60 000 farms remain in operation - half the number working farms following World War II. The overall agricultural area counts for only three percent of Norway - approximately 1.03 millions hectares. Forest covers 22 percent of the land area and 75 percent of Norway consists of mountains, water and built-up areas. The average Norwegian farm size is 15 hectares. About one third of the holdings are milk- producers and an average dairy producer has 13 cows (Statistics Norway 2001a).

The differences when compared to Australian numbers are stark. Most farm holdings in Australia are between 100 and 500 hectares, and an average dairy farm carries 260 cows (Australian Bureau of Statistics 2003b). In both nations, sheep farming is an important aspect of production. Australia generally carries around 106 million sheep (Australian Bureau of Statistics 2003b), the lowest number since 1948 whilst Norway holds around one million sheep (Statistics Norway 2001b).

Between 60 and 70 percent of Australia's agricultural produce is exported, (Australian Bureau of Statistics 2000). Meat, wheat, wool and sugar are the most important export products. Economically, agricultural production counts for around four percent of Australia's GDP, industry 26 percent and service 71 percent. In Norway, agriculture counts for around two percent, industry 39.3 percent and service around 60 percent of the GDP (OECD 2003). Although fish is an important export product for Norway, most agricultural production is destined for the domestic market.

Norway has a significantly different system of agricultural production than Australia, a system more in accordance with natural land capacity, capabilities and traditions which have evolved to match the landscape over centuries. Geography and climate creates different conditions for agricultural production and Norway is considerably smaller than Australia in size (Australia is about 24 times bigger with a population of four times the size). Climatically, the differences between these two producing countries are extreme. Norway has temperate, mild winters and cold summers along the coast, cold winters and hot summers in the interior (Atlademia 2003). This results in fewer 'growing days', particularly in Northern Norway and mountainous areas (Almås, 2004). Despite its northern position, Norway takes advantage of the warm Gulf Stream, which provides agriculture with fair conditions for a reasonable level of agricultural production. Still, seasonal differences are evident with Australian production often year round, especially in pastoral industries.

The 4.5 million Norwegians are spread over a major part of Norway. About 75 percent of the Norwegian population live in what Atlademia (2003) define as urban, but 'cities' are often small, between 10 000 and 50 000 people. This means that people live 'all over' the country. The process of centralisation of the population is perceived as a problem also in Norway. The goal to uphold a populated countryside is maintained within the Norwegian regional policy and is widely supported in the Norwegian population (see e.g. Almås 2004). This issue is also strongly supported by the farmers themselves and their role as

maintainers of rural communities. In Trend-data¹ from 2004, about 70 percent of farmers agreed that agriculture contributes to a high degree to “living rural communities” and “a beautiful countryside”. Around 60 percent believed agriculture’s role in “contributing to knowledge of food production and shaping the Norwegian identity” to be of great value.

Agricultural policies in Norway and Australia

Agricultural production, the market situation and policy relating to agriculture has gone through major alterations since World War II. Now, globalisation, or more specifically, global capitalism has an enormous influence on agribusiness and the food market. Global firms view regions of the world as potential markets and the policy environment enables goods and capital to flow around the world with minimal restrictions (Gray and Lawrence 2001). Still, nations and political and economic institutions like the EU respond to world trade with different policies. Australia and Norway, two western countries originating from the same cultural cradle, have developed quite different policy settings in agriculture. Agricultural production in Australia and in Norway is aimed for different markets and the distinction between domestic or markets abroad are also illustrated through the Norwegian and the Australian policies on agriculture. Some essential features illustrate the developments in these two countries.

As noted earlier, agriculture played an important role in Australian policy following World War II. Agricultural products like wool, sugar, beef and wheat fed a post-war European market. The production was protected, subsidised and regulated by state (Lawrence, Gray and Stehlik 1997). During the 1950s and 1960s agriculture prospered under the Liberal-Country-Party expansion goals of increasing agricultural products and increasing sales abroad (Lawrence 1987). Australia’s rural producers used the substantial benefits they gained from state subsidisation of agriculture to increase production and improve productivity throughout the ‘long-boom’ of capitalist expansion (Lawrence 1987, 9). Already established with a “world trade perspective”, Australian markets send raw agricultural commodities overseas and import a large volume of processed and manufactured goods.

As agricultural expansion also increased in other western countries, overproduction came as a result. As this forced the prices of agricultural products down, agriculture was left vulnerable to market forces. This led farmers into a cost-price-squeeze in the late 1960s, accelerated by the increasing expenses on agricultural inputs produced by agribusiness firms;

Although the terms of trade had begun to move against agriculture from the early 1950’s the state, ever conscious of agriculture’s contribution to export earnings, had succeeded in underwriting farming providing, amongst other benefits, cheap credit, input bounties, loans to marketing authorities, quarantine services, water resource development, research, extension services, subsidies, concessions and taxation relief (Lawrence 1987, 9).

By the end of the 1960s expansionist policies by the state were seen to have contributed to the crisis in agriculture in Australia (Lawrence 1987, 213). In 1973, the accession to power of the Whitlam Labour Government, marked the beginning of the decline in Australia’s post war agricultural prosperity (Lawrence 1987, 9). This also coincided with Great Britain’s entry into the common market which fenced out Australian and New

Zealand from free access to traditional trading partners. During the few years following this period, subsidies were abolished. Even with the reinstatement of a conservative coalition in 1975, subsidies were not brought back to earlier levels (Lawrence 1987). The farmers themselves responded to the crisis by forming The National Farmers' Federation (NFF) taking on an 'anti state-interventionist' approach, applauding economic rationalist views that inefficient farmers and general wage inflexibility were the two major problems facing agriculture (Lawrence 1987).

Australia responded differently than Europe and the US to the emerging realities of integrated global agriculture (Share et al 1991). While Europe and the US have had ongoing protection of their family farming, Australia chose the free trade path. The logic was that with a decline in agricultural subsidies in Europe and the US, these nations would lose their competitive edge and Australia could serve these markets with low price food. Yet, with the European and US trading blocks not giving ground, this strategy served limited success (Share et al 1991, 6).

The changes in agricultural policy are easily illustrated with the dimensions relating to state regulation, the free market and social welfare (Almås 1994; Lawrence, Gray and Stehlik 1997). The interpretation of these figures is

that agricultural policy is, at any given time, a working compromise between the three dimensions; the compromise always takes into consideration the free market, the welfare of the agricultural population, and the nation state plans for development policy regulation (Almås 1994, 17).

Figure 1 illustrates the changes in Australian agricultural policy from the 1950s through the second half of the twentieth century.

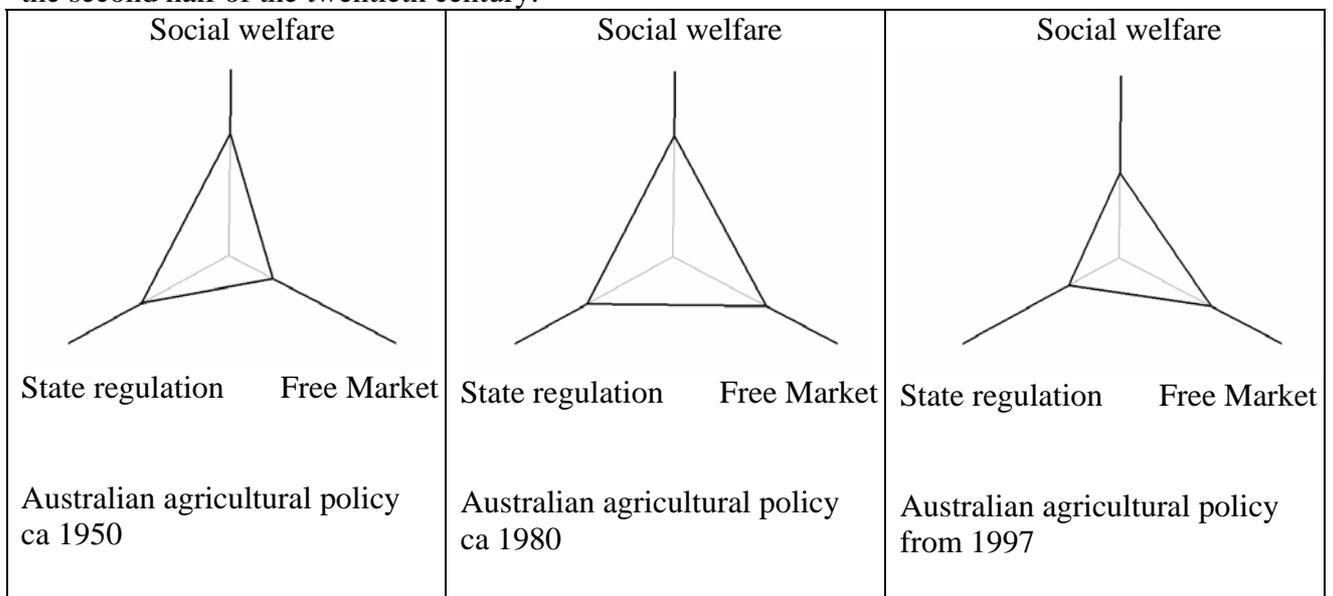


Figure 1 Australian Agricultural Policy since the Second World War

Source: Lawrence et al 1997 (Adapted from Almas 1994)

The three triangles illustrate “the extent to which state regulation, and desires to have farm families (through vehicles of concessions, subsidies and price support) enjoy the benefits

of secure incomes, has given way to the free market as the major determinant of farm prosperity and farm-family welfare” in Australia (Lawrence et al 1997, 5). Australian agricultural policy has since the mid 1970s travelled on a neo-liberalist pathway towards non-subsidised agriculture within a free trade world market. The neo-liberalist domination of Australian policy has resulted in the removal of support to industry, cutting of tariffs and deregulation of the markets. Increasing attention paid to the negative consequences of intensive agriculture on the environment might force Australian agricultural policy to renegotiate on anti-regulation perspectives. At this stage governments encourage individuals and local communities to take action (and recognise) their own environmental problems caused by high pressure on the land.

Different ideals and political goals than those developed in Australia, dominated the second half of the 1900s in Norway. Figure 2 shows the path Norwegian agricultural policy took in this period. In analyses of the 50 years after World War II, Almås (1994) shows how Norwegian agricultural policy developed from a planned economy to what he calls ‘green liberalism’.

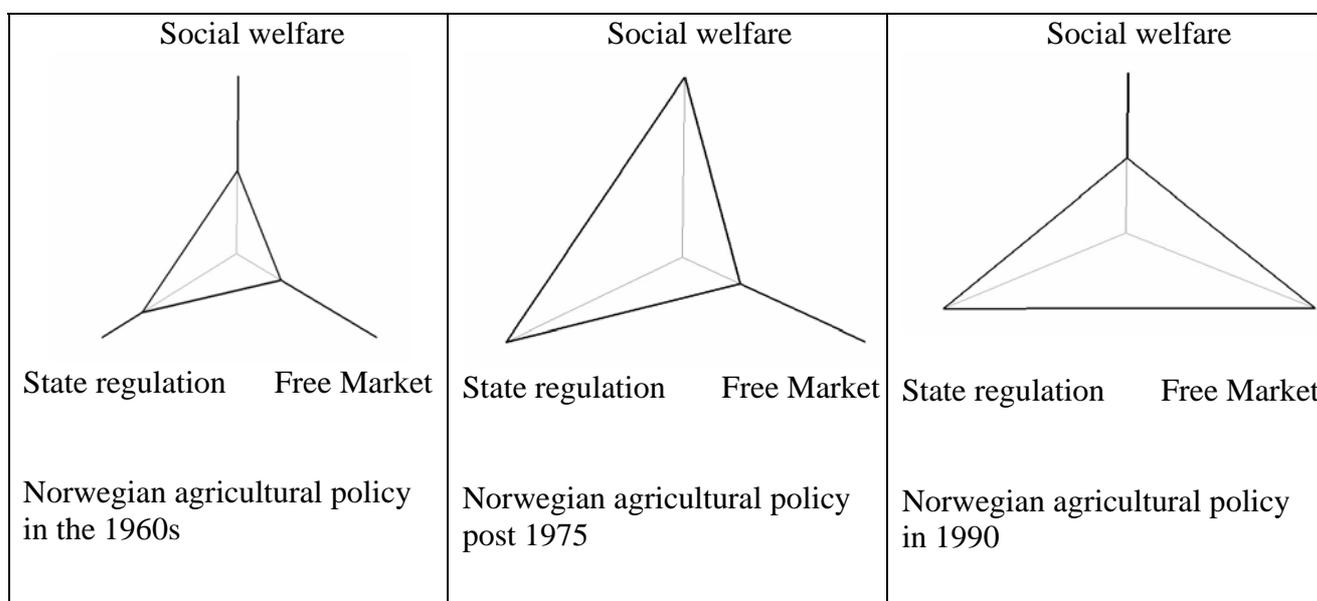


Figure 2 Norwegian Agricultural Policy since the Second World War

Source: Almås 1994

The integration of Norwegian government and the agricultural interests are a key factor in the explanation of how Norwegian agriculture has been sustained through the shift of industrialisation and rationalisation of agricultural production. Through organisation in co-operatives, unions and political parties, the Norwegian farmers since the late 1930s have had an ability to influence policy in a social democratic model of strong co-operation between state and sector interest, natural resources and labour (Almås 2004). Norway has had and still has one of the world’s most comprehensive systems of agricultural subsidies with a system of little export and little import of ‘competing’ agricultural products. It is a goal to uphold agricultural production not only to maintain agricultural areas and food supply, but also to sustain population and employment in rural areas (Almås 2004).

From the 1950s, Norway found itself in an era of productivist ideals, with the techno-scientific development, mechanisation and rationalisation of agriculture (Almås 2004).

Modernisation was the mantra, but so was protection and support through agricultural subsidies. In the 1960s, Norwegian policy concentrated on developing a stable family farm through planned national policies (Almås 1994). Taking the market into consideration, Norwegian agriculture was to be protected. Welfare political issues took over the agenda in the 1970s and to secure the social status of farmers in a market where prices were falling and farmers were forced to leave, a political goal was to equal the incomes of industry workers and farmers. The goal never materialised but gave farmers substantial welfare gains (Almås 1994). It also opened a short period of optimism and growth in Norwegian agricultural production (Almås 2004; Blekesaune and Almås 2002). Protection was still important, but now Norway was involved in international trade agreements like GATT (General Agreement on Trades and Tariffs, the forerunner of WTO) (Almås 2004).

With new international commitments and the problem of overproduction, focus on negative effects of agricultural production on nature, and farmers' increasing dependence on subsidies also entered the public debate in Norway, alternatives had to be developed. From 1980 onwards, there has been a greening and a re-regulation of Norwegian agriculture (Almås 1994). Almås' studies however, have indicated that there has been little change for farmers with changing policies. The key word has been 'persistence' rather than 'change'. Norwegian farmers adapted themselves to policy changes even before actual changes were made. It was found that "farmers in Norway lowered their investments and used less fertilisers and pesticides even before the present policy of 'green liberalism' was implemented" (Almås 1994, 15).

From the 1990s a new epoch arrived with new internal and external competition through institutionalisation and de-cooperativisation. Power has moved to the market, to the EU and the WTO. The WTO-agreement of 1994 forced Norway to lower tariffs over time and state control has been decentralised, and many institutions like marketing boards and the agricultural banks were abolished or merged with others. Despite this, farmers' voices are still heard through the meat and dairy co-operatives and the yearly Agricultural Agreement². However, as Almås (2004) notes, the Norwegian blend of democracy and capitalism is under pressure, partly because Norwegian politicians are abdicating before the global market forces, and partly because Norway is bound by international agreements.

One response to this has been to emphasise the non-trade concerns (NTC) of agriculture via a "multifunctional agriculture". In this context, multifunctional means the additional outputs or functions of a viable ('traditional') agriculture. Agriculture's contribution to a long-term food security, the viability of rural areas, cultural heritage, land conservation, the maintenance of agricultural biodiversity are all on the Norwegian "NTC-list" and put forward in negotiations in the WTO. The multifunctionality of Norwegian agriculture is ensured through economic, legislative and administrative measures and through training and extension (The Norwegian Ministry of Agriculture 2004a). The policy is relatively well supported by the Norwegian public. Despite the fact that large amounts of 'taxpayers money' go into agriculture, three out of four Norwegians want to keep Norwegian agriculture at the present level (Almås 2002), an important factor to keep in mind when discussing implementation of multifunctional agriculture in Norway.

In sum, Australia and Norway have taken quite different approaches to managing their nation's agriculture. Australia has not been impervious to global capitalism and political leadership has exposed agriculture to global competition and free trade by withdrawing

financial support through subsidies. Primary producers who find it difficult to compete at this level have found themselves trapped on an agricultural treadmill requiring increased inputs to assuage lower commodity prices by producing greater volumes of products. Norway's policies have been more protectionist in nature and have been able to engage in a level of global trade whilst supporting non-tradable concerns, such as the landscape, environment and rural communities, through subsidisation and the re-regulation of agriculture.

Agricultural regimes in praxis

Having provided the social, political, historical and geographical context of current agricultural practices in Australia and Norway – and considering some of the definitional and inherent problems of productivism, post-productivism and multifunctionality – the issue of multifunctionality, and the extent to which it has been accepted and implemented by agricultural and state actors in both Norway and Australia, will be analysed. An alternative way of managing multifunctionality as a conceptual and analytic tool is also proposed.

Is there a multifunctional Australian agriculture?

While cognisant of the problems posed by dualistic thinking (Argent 2002; Evans, Morris and Winter 2002; Wilson 2001), a move away from protectionism and subsidisation of agriculture has occurred indicating what some may claim as a 'post-productivist transition' (see Wilson 2001). The neo-liberal state now places greater emphasis on regulatory signals to respond to environmental damage and producers are expected to be independent of government assistance. In Australia, extension services that offered technical advice to farmers and graziers on ways to improve production have been traditionally delivered by State Government agencies (Departments of Agriculture/Primary Industries). Over the last decade these services have generally been in decline and extension specifically targeting sustainable natural resource management have largely been withdrawn. Increasingly landholders are expected to purchase services from the private sector that were historically the province of state-sponsored extension.

There is evidence that countries such as Australia (Argent 2002; Smailes 2002), New Zealand (Willis 2001) and the UK (Burton 2004) have made the conceptual shift away from hardcore productivism, to something else. In Australia, can 'something else' be described as post-productivist or multifunctional? Having noted the pitfalls of the concept 'post-productivist' due to the inherent reliance on dualisms that do not begin to capture the scope of diversity within and between these concepts, multifunctionality is opted for as the most appropriate analytical term. Therefore, is Australian agriculture multifunctional? Does it attend to the needs of non-tradable concerns such as biodiversity, landscape maintenance, cultural heritage, indigenous rights and vibrant rural communities?

The rural geographer J. Holmes (2002) has been one of only a few in Australia to take up this challenge by examining the Australian rangelands in terms of its commodity versus amenity-oriented regions. Holmes argues that there has been a change in Australia's pastoral areas towards post-productivism (2002). He suggests that there are three key forces propelling the post-productivist transition: 1) Agricultural overcapacity, due to technological advances and agricultural policies to a lesser extent; 2) the emergence of

alternative amenity orientated uses, which are capable of competing with, complementing, or replacing agriculture – for example, the increasing importance of non-market uses and the rural as a site of consumption; and 3) Changing societal values, such as the valuing of biodiversity, ecological sustainability and social justice. Of importance to the discussion in this paper, is that Holmes contests the value of agency among rural actors in facilitating the transition to a post-productivist (or multifunctional) countryside and notes that “...the transition has not been dependent on any new directions in pastoral enterprises nor on any attitudinal change by pastoralists...” (2002, 380). However, it can be argued that the role of agricultural actors is pivotal if this continuum towards a post-productivist or multifunctional agriculture is to be maintained.

What is important here is not whether Australian agriculture has moved away from productivism, but to what extent it has moved away. To assess this, it is necessary to examine the varying conceptual spaces within society such as at the level of ideology, policy, discourse or reality (as posited earlier) and how these areas of thought are manifested in legislation and policy or in farmer and ‘green’ discourses. At the level of government or the state, an ideology of multifunctionalism may be held (even if the Australian government does not approve of WTO sanctioned green box agreements) – and to some extent, this may be subsequently translated into practice or reality via legislation and the provision of economic incentives to landholders for ecosystem services. Clearly, at the state level, with the institution of agencies such as Land and Water Australia and the National Heritage Trust and the existence of a National Action Plan for Salinity and Water Quality, there are tangible shifts toward policies recognising the rural as a site not only for agriculture but as a place for the conservation of natural assets.

Over the last decade or two in Australia, governments have instituted a range of regulations and incentives to encourage better environmental management of natural resources on private property. At present, the rural is a site of contested knowledge and contested countryside (see Marsden 1998), with the green lobby gaining more ground politically, to the extent that the Queensland State government have recently legislated against any further broadscale tree clearing. This ban on clear-felling is not only significant in terms of preserving natural heritage but is symbolic that Australian governments are moving towards environmental protection rather than production and hence taking some important, early steps towards multifunctionality.

However, these approaches are all top-down, and it is suggested here that the ‘litmus test’ for how far Australia is along a multifunctional pathway is to gauge how well such concepts are embraced by landholders, who are in essence the caretakers of the majority of the land in Australia. Landholders often possess ethics of stewardship, but often do not practice it to its full potential for a number of complex reasons. Increasingly, there is an expectation that landholders should not compromise the quality of soil and water and threaten biodiversity through broadscale clearing and intensive production. At the same time, landholders fear that such policies will threaten production levels and the already tight economic viability of the family property. The cost-price squeeze regularly reported by primary producers is indicating that more goods must be produced to remain economically viable.

Landholders are subject to a range of contradictory and conflicting messages relating to their levels of production and sustainable land management. Regulatory and policy signals

promote sustainable agriculture and at the same time global economic imperatives are forcing producers to increase outputs to remain competitive and economically viable as a business. This, more often than not, requires that producers engage in more intensified forms of production, for example, clearing native vegetation, re-seeding pastures with introduced species, increasing the use of agri-chemicals or looking towards genetically modified organisms to help increase production and profits. This cycle experienced by many Australia producers suggests a more deeply entrenched 'advanced productivism' rather than a shift from productivist practices or values (see Burton 2004).

Clearly, the productivist paradigm has numerous flaws, however, to the landholder, for whom this has been the only known mode of production and to shift from this now embedded way of doing things, strikes at the core of their own knowledge base, identity and role as producers (Burton 2004). With decreasing opportunities for farm families to improve their financial situation (and in many cases it is dire), landholders report feeling cornered by governments who no longer recognise the farmer as the key actor in rural landscapes. This loss of rural hegemony has had a marked impact upon landholders both emotionally and practically. At the emotional level, landholders report to feeling besieged by green groups and governments who are now seeking to regulate the land management practices of the once-revered farmer. Farmers who were previously upheld as the protectors of the countryside are now at odds to explain why they are often labelled as environmental vandals through the popular media. Landholders are still receiving the message of 'get big or get out' and witnessing the success of corporate farming that has intensified production, outputs and profits. Considering this scenario, it is not difficult to understand why farmers and graziers do not support their government's agricultural policies and why landholders often dispute 'best practice' conservation methods.

It can be argued that the post-productivist context undermines the hegemony of the farmer as the holder of private property rights and custodian of the countryside. In Australia, landholders are very aware that their private property rights are less robust, with State and Federal Governments regulating in a number of areas including vegetation management and water allocation.

Whether Australia is merely 'greening' its agricultural policies, or is on the cusp of reform towards a truly sustainable, multifunctional agriculture is debatable. What is apparent is that Australian governments are a reasonable way toward conceptualising the necessity of multifunctional agriculture if both agriculture and the environment are to be viable in the future. Landholder's views often do not synchronise with those of politicians and policy makers, mostly due to the inherent contradictions of development versus conservation and a sense of betrayal and abandonment at the hands of government. Not only is the move from a productivist form of agriculture disparate across time, agricultural industries, geographical localities, institutions and agricultural actors (Holmes 2002) but it is clear that in Australia there is a chasm between the ideology of local agricultural actors and state actors.

Multifunctional agriculture in Norway

The European situation is quite different from that currently experienced in Australia.

In Europe multifunctionality is inextricably associated with that ideal-type 'the European model of agriculture'. But in this context multifunctionality is clearly

bound up with a social mode of regulation and the contradictory dynamics of European agriculture, with various pressures for continued protectionism, liberalization and 'greening' of the CAP, and the de-sectoralisation of support (Tilzey 2003, 3).

Tilzey (2003) clearly gives an indication of how to critique the model of multifunctional agriculture and the way it has developed in Europe and in this case, Norway. Whilst Australia has not yet labelled itself post-productivist or multifunctional in terms of its agriculture, Norway has certainly embraced the notion of a multifunctional agriculture, endorsed through the WTO, which is clearly expressed within Norwegian agricultural policy. The Norwegian Ministry of Agriculture defines agriculture as multifunctional when it has one or several roles or functions in addition to the production of food and fibre. These other outputs from agriculture include among others; long time food security, viability of rural areas, cultural heritage, land conservation, the maintenance of agricultural landscapes and agri-biological diversity (The Norwegian Ministry of Agriculture 2004b). These 'green-box' categories of support in the WTO Agreement on Agriculture are essential for Norwegian agriculture as agricultural production conditions vary considerably, climatically or for other reasons, among WTO member countries. In order to establish a fair and market-oriented agricultural trading system there is, according to the Norwegian agricultural authorities, a need to acknowledge the right of every country to secure the coexistence of various types of agriculture (The Norwegian Ministry of Agriculture 2004b). Given the greater social good of such services, the landholder should be assisted financially. Norway, as such, has not adjusted its policy in the post-productivist sense described by Wilson (2001) earlier in this paper. The social democratic model of Norway, though certainly liberalised over time, still holds strong corporate elements. Norwegian agriculture has been re-regulated, emphasising green elements or 'green liberalism' (Almås 1994; Almås 2004).

With this, goals for a multifunctional agriculture are stressed in words, but the effect might not be clear. The 2004 Agricultural Agreement encourages further effectiveness and structure-rationalisation to ensure competitiveness in the future with increased international trade and the Norwegian society's demand for goods (The Norwegian Ministry of Agriculture 2004c). This means fewer and bigger farms. At the same time more funding is moved to 'green' actions like further economic support for converting to organic farming and support to take care of cultural landscapes. Farmers are encouraged to take action on their properties and financial support is also given to increase the value added from the agricultural properties like letting out hunting rights, rural and farm tourism, refining farm products and so on.

Does this imply that Norwegian agricultural policy and agriculture as such can be defined as multifunctional? Some critical voices would say that agri-environmental measures functions as a 'green' alibi for further restructuring and polarisation in agriculture and food production (Rønningen 1999). By this Rønningen (1999, 2001) means that most agricultural support is aimed for a further rationalisation of agricultural production whilst at the same time direct support is given to fulfil green goals of multifunctional agriculture. Many farms are getting bigger and more effective in a productivist spirit while multifunctional land use is mainly found on marginal land and in extensive productions like haymaking and grazing land (Flø 2002). Further restrictions and regulations are imposed on agricultural or farmer's land due to international conventions, but also

national policy and goals. These involve national parks, protected landscape areas and the protection of large predators such as bears and wolves. These aims are conflictual at several levels, between rural and urban interests but also for the farmers' themselves.

New roles emerge for the farmers as their role interpretation is changing from being a farmer and food producer to becoming landowners and rural business people (Rønningen 2001). Some struggle as they understand their work as changing to becoming 'public gardeners'. Even though many want to fulfil new goals, the ability to 'nurture' the land is the last thing to be done after a long work day. Economic pressure, lack of time and need for social interaction comes first. In addition, as is found in Australia as well, there is a discrepancy in the interpretation of what is pretty and what is good management. Inherited (productivist) ideals of dark green re-seeded meadows often exceeds the farmers' 'capability' to leave the cultural meadows light-green, full of weed and flowers as said to be good by accepted environmental management standards (Flø 2002).

As described in previous sections, Norwegian agriculture and its family farmers are under pressure economically, due to the food-market situation globally, but also due to economic viability in a domestic labour and food-market. Farmers are struggling to find new and different solutions to these problems in order to stay in agriculture, including pluriactivity, part-time farming, organic farming, farm-based tourism or multifunctionality. Many support the new programmes out of economic causes for farm survival (Rønningen 1999). Though, traditional farming in combination with forestry, fishing and/or hunting has historically been a common strategy among many farmers, especially in areas of low production (Hetland 1986; Flø 1998; Flø and Bjørkhaug 2001). Since most Norwegian farms are small an essential amount of income comes from wage labour outside farming (Bjørkhaug and Blekesaune 2004; Blekesaune and Almås 2002; Løwe 1998; Rognstad 1991). However, this should not only be viewed as an outcome of agriculture income or that farms are too small, many farmers have chosen a double career (Jervell 1999; Rye 2002) and/ or have a partner in the wage earning labour market (Bjørkhaug and Blekesaune 2004)

To meet the critics of the multifunctional model, Norwegian farmers have been found to be ready to change, even before a regulation is enforced (Almås 1994). When asking farmers about what agricultural policy should give priority to, the majority responds most positively to 'multifunctional' roles of agriculture, like decentralised food production, food security, safe food, Norwegian food, rural settlement, cultural landscapes and biological diversity. Farmers' attitudes are in favour of multifunctional goals but they fear cuts in financial support. Farmers and politicians are out of step as farmers' face further rationalisation for cheaper food, something to which they disagree (Trend-data 2004).

The majority of the Norwegian farmers do feel that the environment of the Norwegian agriculture is healthy, though it has, as above, been argued that what 'healthy' and 'good' is, might vary between farmers and environmentalists but also between farmers involved in different types of production. For instance, the opinions regarding the environment and possible effects of pesticides and other artificial inputs on land vary significantly between organic and conventional farmers in Norway (e.g. Bjørkhaug and Flø 1999; Storstad and Bjørkhaug 2003).

The landholders might not find it as difficult to make the transition to this multifunctional mode of production as has been the case in Australia. With smaller farms and the availability of off-farm work and government payments, landholders earn their income from numerous sources and are protected from the anomalies of the global market. Farmers have not lost their trust with policy-makers or society at large. As mentioned earlier, three out of four Norwegians want to keep Norwegian agriculture at the present level (Almås 2002) and farmers feel that the consumers are supportive (Trend-data 2004).

For the survival of agricultural production in Norway, competing within a non-regulated world market is not believed to be possible for the majority of Norwegian farmers. By attaching itself to the 'outside world', through agreements with the EU³ and the WTO and international acts of environmental sustainability, Norway is bound to a change. Protectionism is no longer easy, and as the EU and its policy is open for critique using 'green-box' arguments in WTO negotiations, Norway is doing the same.

Conclusion

It has been argued that whilst multifunctionality and post-productivism is at the level of 'debate' or in the early stages of conceptualisation in Australia, Norway has embedded the language and action of a multifunctional agriculture into its agricultural mode of operation. This has been, to a great extent, facilitated through a high reliance on governmental subsidies, a system based on an agreement between governments and farmers' organisations. As such, agricultural actors have a voice and role in bringing about a multifunctional countryside. At a policy level, there is a shift towards a requirement of more sustainable production and development. Special financial support is given to farmers for their efforts in sustaining cultural and biologically diverse landscapes on agricultural properties. Whilst subsidies have often been used to encourage productivism, the Norwegian experience has also shown that they can be used to bring about multifunctional landscapes. One of the reasons that this has been successful in Norway maintaining the environment and rural towns, is that Norway is less reliant than Australia on the export of agricultural commodities.

The importance of looking separately at the ideology and practice of multifunctionality has been posited. It has been shown that Australian governments and some non-rural actors such as green groups, are in the process of making the conceptual shift toward a multifunctional agriculture and viewing the rural as not only a site of production, but as a site of consumption, biodiversity and cultural heritage. This is occurring to a much lesser extent than in Europe, largely due to geographical features and the tyranny of distance, which makes it difficult for landholders to diversify their incomes and access niche markets and tourism. Whilst Holmes (2002) correctly claims that a number of changes have already occurred in Australian pastoral lands without reliance on changes of values of pastoralists, it is suggested here that agricultural actors do need to be enrolled to continue to move away from hardcore productivism. However, in Australia, landholders are experiencing conflicting messages and market signals that ever increasing productivity is required, whilst at the same time they are increasingly subject to regulations in relation to sustainable land management – the recent ban on tree clearing in Queensland is a prime example. At present, Australia's landholders are generally opposed to government interference in natural resource management at the farm level and are resisting top-down approaches to shift toward more sustainable practices. Norwegian landholders have

evidently been working in collaboration through the farm lobby groups to find a common ground that serves Norway's national interests. From the farmers point of view it is important that Norway gains acceptance internationally in WTO for continued financial support for agricultural production to ensure survival of Norwegian family farming. At this stage it is believed that emphasising the multifunctional role of agriculture might be the right way.

In conclusion, multifunctional agriculture requires support at both the level of the agricultural actors and the state. There is little to be gained from an ideological position of multifunctionality if there are still barriers to the implementation of some of these key features of multifunctionality. Arguably, Australian primary production is situated toward the 'weak' end of a continuum of 'level of multifunctionality' and is constrained not only by the remote location of many Australian properties but also the overarching neoliberal political economy which serves to send market signals that more raw commodities need to be produced for farmers and pastoralists to remain competitive in the global markets. At this stage, multifunctionality in Australia rates weakly as an ideology or policy and even less as a discourse or practice. It has been demonstrated that the concept of multifunctionality in Norwegian agriculture has thrived within a protectionist setting with the support of the public, the state and agricultural actors. In this sense it is very clearly a policy, practice and discourse that aims to preserve rural spaces, the cultural landscape, the farming way of life and food safety.

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Notes

¹ Trend-data 2004 is survey data of Norwegian farmers collected by Centre for Rural Research, Trondheim, Norway in January 2004. Numbers are based on own analyses of these data.

² Important parts of the agricultural policy is laid down in the Agricultural Agreement, negotiated between the farmers' organisations and the Government and approved by the Parliament (The Norwegian Ministry of Agriculture 2004a).

³ Norway is not a member country of the EU but are signatories to the European Economic Area trade agreement.