Forestry Extension: Assisting Forest Owner, Farmer, and Stakeholder Decision-Making

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The Otway Agroforestry Network & the Master TreeGrowers Inc.
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After the welcome and keynote paper, the papers are presented in alphabetical order of the primary author’s surname. At the time of producing the CD-ROM the conference program was still to be finalised, so it was not possible to compile the papers according to the conference program.

All electronic versions of full papers received by the 12th October 2001 were included on the CD-ROM. There is a small number of papers where technical difficulties prevented an accurate reproduction of figures or diagrams. We apologise for any errors as a result of the editing and compilation process.

Digby Race & Rowan Reid,
Editors – Conference proceedings.

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CONTENTS

WELCOME: FORESTRY EXTENSION: ASSISTING FOREST OWNER, FARMER AND STAKEHOLDER DECISION-MAKING.
By Rowan Reid p. viii

KEYNOTE PAPER: EXTENSION AND THE FUTURE OF FAMILY FORESTS: MAKING CONNECTIONS
By John C. Bliss p. 1

USING FORESTRY TO REPAIR OUR DEGRADED LANDSCAPES: WHAT WILL IT TAKE?
By Graeme Anderson p. 12

A RESEARCH-BASED EXTENSION PROGRAM TO FACILITATE THE DEVELOPMENT OF COMMERCIAL FARM FORESTRY INDUSTRIES IN QUEENSLAND
By Glenn Bailey, Susan House & Geoff Dickinson p. 18

MOTIVATING FOREST LANDOWNERS IN THE NORTH CENTRAL UNITED STATES
By Melvin J. Baughman, Karen Updegraff & Juan Carlos Cervantes p. 26

ANALYSIS OF EXTENSION EFFORTS IN BAVARIA: EXTENSIONISTS’ PERCEPTIONS
By Roland Beck & Ullrike Krafft p. 35

WAYS OF IMPROVING FOREST OWNERS’ PARTICIPATION
By Jurij Begus p. 45

WHAT AMERICA’S FEDERAL AND STATE GOVERNMENTS WANT FROM PRIVATE FORESTS: THEIR PREPAREDNESS TO FUND PROGRAMS RELATED TO GOVERNMENT BEING A STAKEHOLDER IN PRIVATE FORESTRY?
By Larry E. Biles p. 57

CHOOSING THE RIGHT DECISION SUPPORT TOOLS
By Kim Brooksbank p. 68

PREDATORS BESIDE A MOUNTAIN STREAM: USING ART TO ENGAGE THE PUBLIC IN DIALOGUE AROUND FORESTRY ISSUES
By Shorna Broussard, Molly Engle, Scott Reed, Viviane Simon-Brown & Brad Withrow-Robinson p. 78

MAKING PARTICIPATION COUNT FOR LANDOWNERS, MANAGERS AND STAKEHOLDERS
By Tim Cadman p. 87
FORESTRY EXTENSION’S ROLE IN STEWARDSHIP PLANNING FOR WOODLAND OWNERS
By Mike Cloughesy p. 110

CONSOLIDATING EXPERIENCES FROM TRAINING AND CAPACITY BUILDING IN FORESTRY EXTENSION: TRANSLATING LESSONS INTO DESIGN FEATURES IN UGANDA
By Byabashaija Mujuni Denis p. 118

HOW TO DETERMINE WHEN YOUR CONSERVATION RESERVE PROGRAM (CRP) PINE PLANTATION IS READY TO THIN
By Stephen G. Dicke, Andrew J. Londo & Timothy A. Traugott p. 127

INCLUDING THE COMMUNITY: COMMUNITY CONSULTATION AND COMMUNICATION IN THE WEST VICTORIA RFA PRIVATE FORESTRY PROJECT
By Maria Dimopoulos, Elaine McKay, Trish Kevin & Andrew Stewart p. 135

SELF-ASSESSMENT IN FARM FORESTRY EXTENSION: FUTURE DIRECTIONS
By Matthew Doig p. 144

FARM FORESTRY POLICY AND EXTENSION: WHAT’S IN IT FOR AUSTRALIA? WHAT’S IN IT FOR FARMERS?
By Jim D. Donaldson p. 161

THE BUGWOOD NETWORK: INFORMATION TECHNOLOGY SUPPORT FOR EXTENSION FORESTRY PROGRAMS IN GEORGIA, USA.
By G. Keith Douce, David J. Moorhead & Charles T. Bargeron p. 179

GENERAL VIEWS ON SILVICULTURE OF PROTECTION OF PROTECTION FORESTRY AND AGROFORESTRY POTENTIAL IN EGYPT
By Abdelwahab B. El-Sayed p. 189

CAPTURING INDUSTRY INVOLVEMENT IN FARM FORESTRY EXTENSION
By Richard Finlay-Jones p. 190

SOWING THE SEEDS FOR CHANGE: THE USE OF NETWORKS TO AMPLIFY EXTENSION PROGRAMS
By Charles F. Hajek p. 196

THE SUGAR GUM STORY: THE MARKETING SUCCESS OF A HUMBLE SHELTER TREE
By Liz Hamilton p. 202

USING A MULTIDISCIPLINARY, INTERAGENCY APPROACH FOR EXTENSION TRAINING IN AGROFORESTRY: FACILITATING LANDOWNER DECISIONS
By Sandra S. Hodge p. 209
FARM SOURCED TIMBER: THE RESTRUCTURING OF THE TIMBER INDUSTRY IN KENYA – OPPORTUNITIES AND CHALLENGES
By Christine Holding, Paul Njuguna & Catherine Gatundu p. 215

UNDERSERVED FOREST LANDOWNER WORKSHOPS: AN OPPORTUNITY FOR BOTH LANDOWNERS AND EXTENSION
By H. Glenn Hughes & Thomas A. Monaghan p. 229

INTERACTIVE KNOWLEDGE SYSTEM FOR FAMILY ENTERPRISE FORESTRY
By Maria Iwarsson & Sverker Johansson p. 238

TAXES AND LAWS: DO THEY CHANGE LANDOWNER BEHAVIOR FOR THE BETTER?
By Mike Jacobson p. 246

TOWARD A MODEL PROGRAM OF GRADUATE EDUCATION IN EXTENSION FORESTRY
By James E. Johnson & Franklin A. Bruce, Jr. p. 254

IS THE ‘TECHNICAL EXPERT’ ROLE OF FARM FORESTRY EXTENSION AGENTS FADING? RECENT EXPERIENCES FROM AFRICA AND IMPLICATIONS FOR FUTURE EXTENSION PROGRAMS
By Alice A. Kaudia & L.M.A. Omoro p. 262

ADVANCEMENT OF FARM FORESTRY EXTENSION IN MADHYA PRADESH, INDIA: A TRAINING AND CAPACITY BUILDING COLLABORATION
By John D. Kellas & Peter J. Shepherd p. 273

REVEGETATION INFORMATION AND TRAINING NEEDS OF WESTERN AUSTRALIA’S EXTENSION INTERMEDIARIES: A QUALITATIVE AND QUANTITATIVE MARKET RESEARCH REPORT
By Stephen Lloyd p. 283

PUTTING TOGETHER THE TOTAL PACKAGE: FARM FORESTRY EXTENSION IN WESTERN AUSTRALIA
By Richard Moore, David Jenkins, Bob Hingston & Glenn Batty p. 293

GROWING PINES IN TRYING TIMES: EXTENSION FORESTRY PROGRAMMING IN THE FIELD
By David J. Moorhead, C.W. Dangerfield, Jr., E.D. Dickens & L. Zipper p. 308

FARMER TO FARMER EXTENSION EXPERIENCE IN DRYLANDS KENYA
By Benard Muok, James Kimondo & Ioki Atsushi p. 313

PARTICIPATORY EXTENSION BY SUBTROPICAL FARM FORESTRY ASSOCIATION: FOR SMALLER TREE GROWERS, BY THESE GROWERS, WITH ALL STAKEHOLDERS
By Martin Novak p. 322
HOW TO REACH RURAL PEOPLE IN DEVELOPING COUNTRIES WITH QUALITY TREE PLANTING MATERIAL
By Peter Ochsner, Iben Nathan & Anders Pedersen p. 334

TRIALS ON FARMS — AND PARTICULARLY “ADAPTATION TRIALS”
By R. John Petheram & Ashari Thahar p. 345

A DYNAMIC CONTEXT: FARM FORESTRY EXTENSION IN AUSTRALIA
By Digby Race, Marlène Buchy & Amabel Fulton p. 352

THE ROLE OF COMMUNITY PARTICIPATION IN FIRE SAFE DECISION-MAKING
By Marlene Rebori p. 363

EXTENSION FOR COMMUNITY FORESTRY DEVELOPMENT IN THE MIDHILL ZONE OF NEPAL
By Buddhi Rejal & R.J. Petheram p. 369

A METHODOLOGY FOR PRIVATE NATIVE FOREST EXTENSION IN SOUTH EAST QUEENSLAND
By Sean Ryan & David Taylor p. 380

PARTICIOPATORY NEEDS ASSESSMENT: IMPROVING EXTENSION FORESTRY PROGRAMS BY MAKING LEARNERS PARTNERS
By Chris Schnepf p. 390

EDUCATION AND RESEARCH: A CASE ANALYSIS WITH THE CENTER FOR FOREST PRODUCTS MARKETING AND MANAGEMENT
By Bob Smith p. 398

FACTORS AFFECTING PROPERTY OWNER DECISIONS ABOUT DEFENSIBLE SPACE
By Ed Smith & Marlene Rebori p. 404

INNOVATIONS IN FORESTRY TEACHING AND LEARNING: LESSONS FROM THE AUSTRALIAN MASTER TREEGROWER PROGRAM
By Peter Stephen & Rowan Reid p. 409

FARMER AND LANDHOLDER CONTRIBUTIONS TO AUSTRALIA’S COMMERCIAL PLANTATIONS
By Nick Stephens, Mellissa Wood, Belinda Allison & Claire Howell p. 419

SEED AND INFORMATION SUPPORT FOR FARM FORESTRY: FARMERS AS RESEARCHERS
By Tim Vercoe, Roger Arnold & David Bush p. 431

IMPLEMENTATION OF RIPARIAN FOREST BUFFER SYSTEMS FOR THE RANCOCAS WATERSHED
NEW TECHNOLOGIES AND NEW OPPORTUNITIES: SUPPLY AND DEMAND MARKET DEVELOPMENT FOR SUSTAINABLE PRIVATE FORESTRY
By Andrew Walker-Morison  p. 449

PRE-CONDITIONS FOR SPONTANEOUS AGROFORESTRY IN HILLY REGIONS OF VIETNAM: IMPLICATIONS FOR EXTENSION
By Paul Woods & R. John Petheram  p. 459
Welcome to the IUFRO conference on

FORESTRY EXTENSION:
ASSISTING FOREST OWNER, FARMER AND STAKEHOLDER
DECISION-MAKING.

Rowan Reid
Forestry Department – the University of Melbourne, and
Conference Convenor

Never before has there been such widespread support for the establishment of trees on Australian farms. The threat posed to farm productivity, water quality and our unique biodiversity arising from over clearing has inspired extraordinary government funding and community support for revegetation. At the same time, concerns over the harvesting of timber from Australia’s publicly owned native forests and the importation of tropical timbers has spawned widespread public support for timber plantations as a real alternative. The emotion and resolve generated by these issues highlights the importance that many Australians place on the environmental, economic and social benefits of forests.

However, despite this support, the conversion of farmland to industrial monoculture timber plantations on a large-scale has meet with opposition from rural communities and conservation groups. Notwithstanding the environmental and economic inadequacies of some farming practices, the conversion of farmland to industrial plantations is seen by many as a greater threat to their way of life.

Fortunately there are many farmers who would argue that forests are an essential component of an environmentally, socially and economically sustainable agricultural landscape. Rather than replace farms with forests they seem to favour the integration of multipurpose plantations into their existing farming landscapes in a way that enhances farm productivity, protects the natural environment, and revitalises farming communities. Across Australia enthusiastic farmer groups, supported by governments, industry, professionals and conservationists, have sprung up in support of Agroforestry and Farm Forestry.

For most of us Australians here, this conference is about the role of extension in the development and support of agroforestry and farm forestry. It is about understanding what drives farmer participation and finding ways of harnessing community and industry interest in the products and services that forests on farms may provide. We hope to learn from our many friends from Europe and North America where there has been a longer history of professional extension interest in “non-industrial private landowners” and the suite of benefits that forests on private land offer landowners and their communities. We are also keen to hear of the challenges facing forestry extension in Africa and other countries where the need to establish and manage forests is possibly greater than here on the driest continent on earth.
Can we put the definitions to rest – finally?

Most formal definitions of agroforestry and farm forestry focus on the role the trees play and their location or arrangement. Although less commonly used today, Australian institutional definitions of agroforestry actually predate those for farm forestry. With direct reference to grazing or cropping underneath or between commercial tree crops, most definitions of agroforestry focused on terms such as the “simultaneous production of wood and agricultural products” (Australian Forestry Council 1980) or “the integration of forestry and agriculture on the same land unit” (Victorian Government 1991).

When our federal government singled out farm forestry for special funding support in the early 1990’s a broader definition was on offer: “Farm Forestry is the incorporation of commercial tree growing into farming systems; it can take many forms: plantations on farms, woodlots, timber belts, alleys, wide-spaced tree plantings, and native forests”. The anticipated or desired advantages were included in many of the definitions put forward at the time: “It improves agricultural production by providing shelter for stock and crops. It also provides substantial environmental benefits such as water table and salinity reduction” (National Farm Forestry Program 1995).

Unfortunately, not all agroforestry and farm forestry projects have been as successful and the early definitions may have envisaged. Nor have these prescriptive definitions been adequate in helping us understand or incorporate the widening interest in the role and purpose of trees on farms. These challenges have forced a welcome simplification in recent definitions to the point that agroforestry and farm forestry are now been presented as simply “trees on farms” (Joint Venture Agroforestry Program & International Council for Research into Agroforestry).

Can I suggest that it is not sufficient try and distinguish agroforestry or farm forestry from other forms of forestry by how they look or even by their function? It is not the scale, the planting pattern, the species or the purpose of a forest that makes it a farm forest or agroforest: it is the ownership. Not just ownership of the land or the trees, but ownership of the decision to do it and how it is done. I see farm forestry and agroforestry as the simply the result a farmer’s decision to practice forestry. The terms can be used interchangeably. My definition for both is:

“Farm Forestry and agroforestry are the commitment of resources by farmers, alone or in partnership, towards the establishment or management of forests on their land.”

Farm forestry and agroforestry are therefore about choice; farmers choosing to commit their resources to the development and management of forests for, amongst other things, commercial return. Farmers may establish and manage their forests for any mix of the benefits that forests can provide. They may place an emphasis on a single outcome such as timber production or biodiversity or they may seek to balance a range of benefits in a multipurpose planting. Their priorities may vary over the farm or change over time. A forest initially established or managed for wildlife or land protection might later be harvested for timber or
valued for its beauty. Forests on farms may increase agricultural production or simply displace it. They might be sustainable, even improve economic, social and environmental capital, or they may deplete these assets. The farmer, or their partners, may profit from farm forestry or come to regret their involvement.

Making a commitment to forestry is not necessarily a good decision – it is simply a decision. A decision made by farmers that may be influenced by any number of individuals or groups including industry, government, neighbours, community groups and family members. A decision made based on what the farmers and those advising them understand about the establishment, management and protection of forests and their economic, social and environmental impact. A decision that might be different if there were changes in the information and technology available, the regulations governing landuse or the availability of mechanism for the trading of the products and services that forestry can provide.

The theme of this conference is Forestry Extension: Assisting Forest Owner, Farmer and Stakeholder Decision-Making. If, as many of us would like to believe, trees and forests do offer an un-tapped opportunity to improve the economic, social and environmental landscape of rural areas then we might assume that by supporting the farmer who make the decisions, and those who are able to influence them, will lead to more forests and better forest management.

The alternative approach: Farmer/Stakeholder Negotiation

If farm forestry is to attract broad based support we require a new approach to identifying forestry opportunities and of engaging farmers and stakeholders; an approach born out of the potential to build more resilient rural landscapes for the future rather than simply solving the problems of the past. Farmers rarely talk of their trees as “underpinning future timber supplies”, “reducing water treatment costs”, “reducing the trade deficit”, or “providing an alternative wood supply to native forests”. Rather than trying to identify and sell “best-bet” forestry options, those seeking particular outcomes, such as timber production, land degradation control or biodiversity, must try and marry their needs to those of farmers.

In meeting their own needs farmers can help achieve the goals of others, however, it is most unlikely that they will wholeheartedly accept the “best-bet” purpose options advocated by single interest groups. Research suggests that for many farmers being able to “hand their farm over to their children in a better condition than they found it” and to “farm within the environmental capacity of the land” are important goals. Amongst those farmers who had planted trees the main immediate purposes were to provide shelter for stock and crops, address land degradation or provide wildlife habitat (Wilson et al 1995). Clearly forestry has a role to play in meeting farmers’ needs and aspirations even though they are not exactly the problems identified by government, industry and community groups.

Government, industry, conservation groups and water authorities could be considered the clients or customers of the farmers. By designing and managing their forests in a way that better meets the needs or interests of others, farmers may be able to negotiate an attractive “sale” of the forestry products and environmental or social services their forest provides. The return to the farmers
may come in the form of higher prices for forest products, stewardship payments for provision of environmental services, rate rebates, planning support, grants, special privileges, marketing assistance, joint ventures or other incentives. The key is to allow farmers to retain the ownership and responsibility for land use decisions thereby encouraging innovation in design and opportunities for multipurpose production.

Rather than carry the full cost of revegetation each stakeholders need only “pay” for the outcomes they are able to capture. For example, high value sawlogs don’t need to be produced in a dedicated sawlog plantation. They could be grown in a wildlife corridor or a shelterbelt. Prospective purchases simply need to outline their product specifications and negotiate a price and point of sale that encourages farmers to consider designs that will produce the products and services they require. The farmers must then balance the prospects for future sales with their other interests before they design and manage a forest to suit.

Penalties, like incentives, are also a legitimate tool that governments and others can use to express they interests. For example, harvesting contractors often penalise farmers for the increased costs associated with harvesting small or difficult areas. Some local governments are introducing differential rating to offer rate rebates to those prepared to protect native forests or establish multipurpose farm forestry. They may also increase rates on industrial plantations that they feel are not contributing to their vision for their shire.

Incentives, payments, penalties, regulations and codes of practice should be “outcome orientated” so as to allow farmers to develop innovative ways of managing their land. For example, codes of practice that do not permit the harvesting of timber from stream reserves or native forests because of the anticipated environmental impacts may actually encourage neglect. Outcome orientated codes that allow farmers to manage their land as they wish as long as long their management it does not threaten clearly defined environmental or social values encourages innovation and the development of low-impact multipurpose farm forestry options.

When the wider community recognise and accept that it is the farmers who make the final decision about the establishment and management of forests on their land farm forestry will be able to naturally evolve as an integral part of the farming landscape. Australian farmers, and no doubt farmers around the world, have a reputation for modifying and adapting farming innovations to suit their needs. The future of farm forestry will depend on what the farming communities want of forestry and the preparedness of interest groups to “pay” for the benefits they wish to see.

**Elegant solutions: Appropriate farm forestry designs**

If farmers are going to take responsibility for the design and development of their forests then farm forestry research, education and extension needs to focus on assisting farmers design and evaluate farm forestry opportunities in light of their own circumstances and performance criteria. A farmer’s interest may be initially driven by an attractive vision of what forestry might offer them, their family or community. As they consider the opportunities they will continually evaluate them
against their personal beliefs, aspirations and constraints. Commitment will only follow if they are able to identify an attractive proposition, access the necessary resources and build confidence in their ability to overcome the inevitable risks.

Once they have made a personal commitment (e.g., established the trees or entered into a forest agreement) future success will depend on maintaining confidence, repeated investment and continuing personal satisfaction. It is a farmer's responsibility to ensure that their commitment of land, time, money and enthusiasm reflects their own aspirations and personal performance criteria. An initial commitment does not guarantee future satisfaction and is a poor measure of success.

Research and extension must also work to assist stakeholders identify and define their own performance criteria and methods by which they might negotiate with farmers. Clearly identifiable and measurable performance criteria that reflect stakeholder interests must form the basis for payments, controls or penalties imposed on farmers by government, industry and community groups.

Multipurpose farm forestry allows the costs of producing one product to be paid for by the benefits provided by another. For example, if a farmer can justify the cost of establishing commercial trees on the basis of non-timber values the forest will provide as it grows then the traditional constraints facing commercial forestry – namely the cost of the land and the long investment period – become less important. In this way farmers are developing “viable” multipurpose forestry options for areas once considered too dry, too small, too difficult or too far away for “real” forestry.

The aim must be to design unique agroforestry and farm forestry systems that match each grower’s site conditions, non-timber interests, personal resources, market opportunities and future aspirations. This will result in a diversity of ownership, layout, structure and function that reflects the physical, social and economic diversity inherent within farming communities - elegant solutions that express the unique situation facing each farmer.

Farm forestry is about fitting forestry into a farming culture rather than replacing it. If farm forestry is to contribute to the visions of industries, communities and governments these interest groups must first ensure that farmers are able to achieve their goals. Farm forestry extension should encourage farmers to adapt and refine forestry options to best suit their own circumstances and allow those with a legitimate interest in the products and services provided to adequately reward those farmers who are able to deliver.

The IUFRO Extension Working Party Symposium

I am pleased to be able to welcome you all to Lorne for this symposium. This region, from the surf along the coast, over the forests on the hills, to the farmland to the north, is my personal “homeland”. The magnificent natural and planted forests of the Otway Ranges have attracted the interest of foresters for generations: The ranges support habitats that sustain the tallest flowering trees in the world (Eucalyptus regnans), unique temperate rainforests and complex coastal heath communities.
Over the years, government, industry and community interests in nature conservation, timber production, tourism, and water supply have seen the forests of the Otways become one of the most multiple-use, and hotly contested, forests in the country. Like the forests of Germany, California or the wet tropics of north Queensland the Otways has much to offer a visiting forester or tree grower.

Despite this rich forest history, I believe it is in our generation now that we are seeing one of the most remarkable and exciting forest developments. One that offers hope, rather than gloom and thrives on cooperation rather than conflict. Farmer's enthusiasm and increasing participation in forestry in the Otways is a good news story. I have been lucky enough to be able to participate in the rise of farm forestry in the Otway region, alongside the many farmers, scientists, government staff and industries. It is an exciting time.

Over the course of the week we will give you the chance enjoy the natural beauty of the region and to share in our story of farm forestry. You will meet many of the characters of the region and sense their enthusiasm and commitment. You will think of your own homeland, of its natural beauty and characters, and you will have the opportunity to share your story with us. I know from my own travels that the enthusiasm, commitment and interest in farm and family forestry is growing in many areas and that the need for conferences like this has never been greater.

So, whether you have come from across the ridge, across the country or across the equator, thank you for coming. Although it is our interest in trees and forests that bring us together when we leave it will be the friendships and shared experiences that we remember. On behalf of Marianne, Digby, Peter, Andrew and myself, I welcome you to Lorne and to the Otway Ranges.

References available on request.