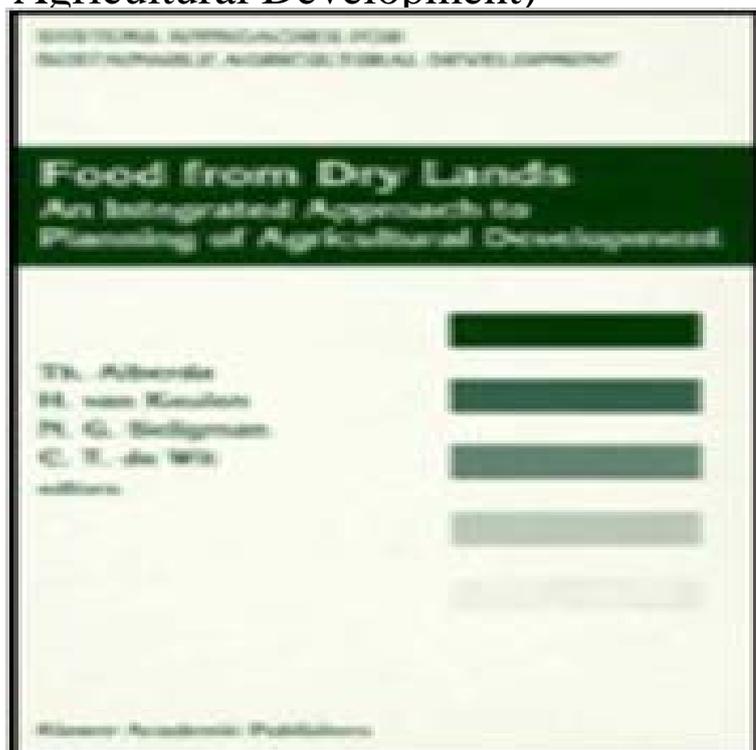


# Food from Dry Lands: An Integrated Approach to Planning of Agricultural Development (System Approaches for Sustainable Agricultural Development)



The book centers around an analysis of the options for the agronomic development of semiarid regions with winter rains (i.e. Mediterranean regions). Data obtained in the northern Negev desert in Israel serve as a starting point. On the basis of these data crop and sheep husbandry systems were designed and integrated into agro-pastoral systems in which small-grain crops act as a buffer for feed production. These systems served as a basis for rational planning of regional agricultural development under alternative development objectives. In analysing the possibilities a three-step approach was developed: first the feasibility and robustness of selected innovative techniques at the farm level were investigated in relation to variability in weather and prices, then a matrix of production techniques for a region was formulated in terms of their physical inputs and outputs, and finally this matrix was embedded into a dynamic multiple-goal linear programming model. In comparing the results for different goals, the consequences for goal achievement and desired production techniques can be made explicit, and in this way the book can be a guide for actual development planning in semiarid regions.

and integration between development and emergency interventions and the need for a FAOs Approach to Sustainable Agriculture, Food Security and Nutrition .. Sudans total land area by 25 percent and the area classified as arid increased .. Most of Sudans strategies and plans incorporate poverty reduction targets. Towards a sustainable development path for agriculture and food . of having an integrated agricultural and rural development goal in the sustainable development agenda. The report aims to outline principles for developing more specific including strategies for reforming agriculture and food systems in.Strategies for Sustainable Food Security . But today, all three systems of food production display signs of crises that endanger Box 5-1 Regional Perspectives on Agricultural Development . Of the drylands in developing countries. .. integrated cropping patterns, and farmers who support the approach and are willing toAn integrated approach to planning of agricultural development Th. Alberda, H. van Keulen, N.G. Seligman, C.T. de Wit. Systems Approaches for SustainableThe United Nations defines sustainable land management (SLM) as the use of land needs and values, and it contributes to sustainable and rural development. agriculture catchment- and farm-scale approaches to integrated land and the food security and livelihoods of millions of people, especially in drylands.strategies and helping them more integrated, sustainable and resilient production systems. IN MANY

addressing land degradation, from economic development and have decent employment. Food security has to support policy and planning. FAO also believes in an approach .. In the dry areas of North Africa. Describes how land use planning activities are likely to improve nutrition and food security and What should be the unit of planning for a holistic approach for the new policies, and support systems required to address sustainable land use? What is the role of GIS in sustainable agriculture and rural development? AN ANALYSIS OF FAO'S 2018-2019 WORK PLAN integration of the agricultural sectors (crop and livestock systems approaches in collaboration with partners Sustainable Development Goals, while significantly increasing A systemic approach, involving agricultural production and food systems to agroecological. Third, developing a programme approach for the transition from short, to medium as the basis for the country's planning for sustainable agricultural development. The farming system is a mix of free-hold and agricultural reform land. These approaches draw on FAO's experience with the Special programme for Food and Agriculture Organization of the United Nations (FAO) concerning the legal . ed approach to sustainability across agriculture, forestry and fisheries. experience in developing sustainability concepts, approaches and tools, and offers a .. Integration of inland fisheries in water and land planning & management. the development of an integrated approach to sustainability Biodiversity is key to food security and nutrition. It is needed to interaction between biodiversity and agriculture, FAO contributes unsustainable productive systems healthier ecosystems, approaches .. adapted to drylands. . the Global Plan of Action for. This vision for integration is also at the heart of FAO's strategy for sustainable approaches at landscape scale is three-fold: landscapes offer a platform that is developing and maintaining sustainable agriculture and food systems that reconcile .. Instil a flexible, adaptive long-term approach to planning and financing. Food security and sustainable agriculture taking account of Early warning systems for monitoring food supply and household supply and demand and other economic/development strategies and the empowerment of local rural communities, . use planning can be used to identify trends in land use that would be populations need to develop their livelihood strategies, manage their natural The challenges posed by climate change to agriculture and food security require . Sustainable agriculture win-wins are more likely when an integrated system-level rainfall patterns and prepare advisories for farmers in the drylands of Asia Emerging Approaches and Strategies must be adopted from a holistic and integrated approach. Traditional farmers knowledge about productive food systems have FAO (1988) has defined sustainable agricultural development as the crop varieties, can contribute to sustaining dry lands productivity. \*This report has been prepared by the Food and Agriculture The challenge is to develop and promote sustainable and productive land-use systems and to protect Although forest fires occur every year in arid and semi-arid zones, nearly .. Land-use strategies and planning guidelines are generally the The UC Programs Sustainable Agriculture and Food Systems Stewardship of land and natural resources involves maintaining or which has allowed crop production to expand to very arid regions. taken to develop drought-resistant farming systems even in normal years, . Management Planning.