GENDER EQUALITY AND SUSTAINABLE DEVELOPMENT: A PATHWAYS APPROACH

MELISSA LEACH | LYLA MEHTA | PREETHA PRABHAKARAN
FOR THE WORLD SURVEY ON THE ROLE OF WOMEN IN DEVELOPMENT 2014

UN WOMEN

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This paper has been developed from a background paper that informed the UN Women flagship report *The World Survey on the Role of Women in Development 2014: Gender Equality and Sustainable Development* by Melissa Leach, Director, Institute of Development Studies, University of Sussex; Lyla Mehta, Professorial Fellow, Institute of Development Studies, University of Sussex and Preetha Prabhakaran, Programme Manager, CLTS Foundation.

Some of the same material also appears in chapter 1 of Leach et al (2015), although this Discussion Paper is a substantially longer and more elaborated version of the arguments and illustrations presented there.

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SUMMARY

The challenges of building pathways to sustainability and enhancing gender equality are both urgent. This paper explores why they must be addressed together, and how this might be done. It begins by showing the moral, ethical and practical reasons why gender equality must be integral to sustainable development. Around many issues – whether work and industrial production, population and reproduction, food and agriculture, or water, sanitation and energy – dominant development pathways have proved both unsustainable and gender unequal. Both economic, social and environmental unsustainability and gender inequality are produced by, and yet threaten to undermine, market-focused, neo-liberal patterns of growth. As troubling intersections of unsustainability and gender inequality create environmental pressures around climate change, biodiversity and pollution, so shocks, stresses and feedbacks may undermine gendered rights and capabilities even further. But the reverse is also possible: gender equality and sustainability can powerfully reinforce each other in alternative pathways.

Integrating gender equality with sustainable development requires profound conceptual understanding of both concepts and their interlinkages. Thus the paper puts forward a 'gendered pathways approach', as a conceptual framework for addressing the interactions, tensions and trade-offs between different dimensions of gender equality and of sustainability. The gendered pathways approach offers guidelines for analysing current pathways of change and imagining and appraising alternatives, continually asking 'sustainability of what, for whom'?

Tracing interlinkages between gender and sustainability is nothing new, however. The paper provides a historical review of how diverse concepts – or narratives – about women, gender and sustainability have emerged and come to co-exist. Tracing shifting feminist and sustainability debates in analysis and policy from colonial times to the present, it considers how gender has been conceptualized and the gendered outcomes of sustainability-focused policies and programmes. This includes a review of gender thinking – and silences – in current approaches to climate change, green economies and planetary boundaries. The review reveals that powerful narratives have sometimes worked to hide or misrepresent gender-sustainability linkages. In the name of environmental protection, women have sometimes been dispossessed from their lands, forests and water resources. Due to problematic linkages between women and nature, women's roles as so-called 'carers' of nature have sometimes been essentialized, making women responsible for environmental chores that draw on their voluntary labour in narratives that cast them as 'sustainability saviours'. Re-visiting a longer history of sustainability thinking and feminist scholarship highlights problems and potentials in developing a fully 'gendered pathways approach'. Building on this review, the paper goes on to elaborate this approach more fully, drawing particularly on the insights from feminist political economy, feminist political ecology and studies of gendered subjectivities and embodiment.

The paper also acknowledges tensions and trade-offs in different pathways. Some will promote sustainability at the cost of gender equality; some may promote gender equality and neglect key dimensions of sustainability. Since pathways are dynamic, they can have unintended social, technological and environmental consequences as well that also affect outcomes in terms of gender (in)equality. Negotiating such dynamics requires inclusive learning and deliberation processes and ways to monitor exclusions, trade-offs and emerging opportunities, as well as ongoing awareness of the complex politics of both gender and sustainability.

Finally, the paper addresses the policy and political challenges of transforming pathways towards greater gender equality and sustainability. Strengthening and refining public policies and investments is key; but beyond and complementing these lies scope to build

gender-progressive alliances between public and private actors, state and civil society institutions, and formal and informal practices. Ultimately, feminist movements and collective organizing, emerging in diverse ways and places across the world, many offer the greatest hope both for challenging unsustainable pathways and for charting new ones that lead us in more sustainable, gender-equal directions.

RÉSUMÉ

Il importe de relever d'urgence les défis liés à la promotion de la durabilité et de l'égalité des sexes. Ce document analyse les raisons pour lesquelles ces défis doivent être relevés simultanément, et explique comment cela est possible . Il commence par présenter les raisons morales, éthiques et pratiques pour lesquelles l'égalité des sexes doit faire partie intégrante du développement durable. Les modes de développement durable se sont avérés non durables et inégalitaires en termes de genre dans de nombreux domaines qu'il s'agisse du travail et de la production industrielle, de la population et de la reproduction, de l'alimentation et de l'agriculture, de l'assainissement et de l'énergie.   La non-durabilité économique, sociale et environnementale et les inégalités entre les sexes sont les fruits des schémas néo-libéraux d'une croissance axée sur le marché et menacent de les saper. Les interactions entre la non-durabilité et les inégalités entre les sexes engendrent des pressions environnementales en termes de changements climatiques, de biodiversité et de pollution, mais les chocs, les tensions et les rétroactions pourraient saper encore davantage les droits et les capacités propices à la promotion de l'égalité des sexes. Mais l'inverse est aussi possible : l'égalité des sexes et la durabilité peuvent se renforcer mutuellement d'autres manières.

Intégrer l'égalité des sexes dans le développement durable nécessite une compréhension conceptuelle importante tant des concepts que de leurs liens. Aussi ce document met-il en lumière une « approche axée sur des trajectoires fondées sur l'égalité des sexes », en tant que cadre conceptuel permettant de lutter contre les interactions et les tensions des différentes dimensions de l'égalité des sexes et de la durabilité. Cette approche propose des lignes directrices permettant d'analyser les trajectoires actuelles du changement, d'imaginer et de tester les alternatives en se posant continuellement les questions « durabilité de quoi, pour qui »?

L'identification des liens d'interdépendance entre le genre et la durabilité n'a pourtant rien de nouveau. Le présent document présente une analyse historique de la manière dont divers concepts, ou récits, relatifs aux femmes, au genre et à la durabilité ont émergé et sont parvenus à coexister. En présentant les débats, souvent mouvants, sur le féminisme et la durabilité en termes d'analyses et de politiques allant de l'époque coloniale jusqu'à nos jours, il examine comment le genre a été conceptualisé ainsi que les résultats genrés des politiques et programmes axés sur la durabilité. Ce document comprend une analyse du raisonnement sexospécifique — et de ses silences — en termes d'approches du changement climatique, des économies vertes et des frontières planétaires. Cette analyse révèle que des récits forts ont parfois contribué à masquer ou à dénaturer les liens entre le genre et la durabilité. Au nom de la protection environnementale, les femmes ont été parfois dépossédées de leurs terres, de leurs forêts et de leurs ressources en eau. En raison des liens d'interdépendance entre les femmes et la nature, les rôles des femmes en tant que « protectrices de la nature » ont parfois été essentialisés, les femmes étant glorifiées dans des récits qui les présentaient comme les « protectrices de la durabilité ». Revisiter l'histoire plus étendue de la pensée sur la durabilité et la recherche féministe met en lumière les problèmes et les possibilités liés au développement d'une « approche complète axée sur des trajectoires fondées sur le genre ». En s'appuyant sur cet examen, le présent document développe plus précisément cette approche, s'appuyant notamment sur les idées de l'économie politique féministe, de l'écologie

politique féministe et des études sur les subjectivités fondées sur le sexe et leurs avatars.

Ce document reconnait aussi les tensions et les compromis présents dans différentes trajectoires. Certains feront la promotion de la durabilité au détriment de l'égalité des sexes; d'autres promouvront l'égalité des sexes et négligeront les dimensions clés de la durabilité. Parce que les trajectoires sont dynamiques, elles peuvent aussi avoir des conséquences sociales, technologiques et environnementales inattendues qui influencent aussi les résultats en termes d'égalité des sexes. Négocier ces dynamiques requiert des processus d'apprentissage et de délibération inclusifs et des moyens de contrôler les exclusions, les compromis et les opportunités émergentes, ainsi qu'une conscience constante des politiques complexes de genre et de durabilité.

Enfin, le document aborde les défis stratégiques et politiques consistant à transformer les trajectoires vers une plus grande égalité des genres et une plus grande durabilité. La clé est de renforcer et d'affiner les politiques publiques et les investissements, mais au-delà de ces aspects et en vue de les compléter, il y a la possibilité de forger des alliances progressives en termes de genre entre les acteurs publics et privés, les institutions publiques et de la société civile et les pratiques formelles et informelles. En fin de compte, parmi les mouvements féministes et les organisations collectives qui apparaissent de différentes manières et dans divers lieux dans le monde, nombreux sont celles qui offrent un grand espoir de remettre en question les mesures non durables et d'en créer de nouvelles plus orientées vers la durabilité et l'égalité des sexes.

RESUMEN

Nos encontramos frente a dos retos urgentes: trazar vías que conduzcan a la sostenibilidad y aumentar la igualdad de género. En este documento se analiza por qué es preciso abordar estos dos aspectos conjuntamente y cómo se podría encarar la tarea. El documento empieza por presentar los motivos morales, éticos y prácticos por los que la igualdad de género debe ser un componente integral del desarrollo sostenible. En muchos ámbitos —trabajo y producción industrial, población y reproducción, alimentos y agricultura, o agua, saneamiento y energía—, las vías dominantes que conducen al desarrollo han demostrado ser insostenibles y desiguales desde el punto de vista del género. Tanto la falta de sostenibilidad económica, social y ambiental como la desigualdad de género son producto de los patrones de crecimiento neoliberales orientados al mercado, que a la vez amenazan con socavarlos. Del mismo modo que las intersecciones preocupantes de la falta de sostenibilidad y la desigualdad de género generan presiones en el área ambiental en lo relativo al cambio climático, la biodiversidad y la contaminación, las crisis, las tensiones y las reacciones que provocan pueden debilitar aún más los derechos y las capacidades en relación con

el género. Pero también puede darse el fenómeno opuesto: la igualdad de género y la sostenibilidad pueden actuar como un refuerzo mutuo poderoso si se adoptan vías alternativas.

Para lograr una integración entre la igualdad de género y el desarrollo sostenible, se requiere una profunda comprensión de ambos conceptos y de la forma en que se interconectan. Así, este documento postula un "enfoque de vías en función del género", que consiste en un marco conceptual para abordar las interacciones, las tensiones y las concesiones entre las distintas dimensiones de la igualdad de género y la sostenibilidad. El enfoque de vías en función del género ofrece directrices para analizar las vías de cambio vigentes e imaginar y evaluar alternativas, siempre preguntando: ¿"sostenibilidad de qué y para quién"?

Sin embargo, el examen de las interconexiones entre el género y la sostenibilidad no es nada nuevo. El documento ofrece un repaso histórico del modo en que han surgido y han llegado a coexistir los diversos conceptos —o narrativas— sobre las mujeres, el género y la sostenibilidad. Rastrea la evolución de los debates

feministas y aquellos sobre la sostenibilidad —tanto en el ámbito del análisis como en el de las políticas— desde la época colonial hasta el presente, y considera de qué modo se ha conceptualizado el género y cuáles han sido los resultados de género de las políticas y los programas centrados en la sostenibilidad. Esta tarea comprende una revisión del pensamiento —y los silencios— en torno al género en los enfoques actuales frente al cambio climático, las economías ecológicas y los límites planetarios. La revisión revela que, en algunos casos, hay narrativas potentes que han contribuido a ocultar o tergiversar las conexiones entre el género y la sostenibilidad. En ocasiones, en nombre de la protección del medio ambiente, las mujeres han sido despojadas de sus tierras, bosques y recursos hídricos. Debido al carácter problemático de las conexiones entre mujeres y naturaleza, a veces se ha esencializado el papel de las mujeres como "cuidadoras" de la naturaleza. Así, se las ha responsabilizado de tareas ambientales aprovechando un trabajo que realizan voluntariamente, en narrativas que las consagran como "salvadoras de la sostenibilidad". Al repasar un extenso historial de pensamiento sobre la sostenibilidad y de trabajos académicos feministas, salen a la luz los problemas y los potenciales inherentes a la tarea de desarrollar un verdadero "enfoque de vías en función del género". Partiendo de ese repaso, el documento profundiza en este enfoque y hace particular hincapié en las aportaciones de la economía política feminista, la ecología política feminista, y los estudios sobre las subjetividades y representaciones desde una perspectiva de género.

El documento también aborda las tensiones y las concesiones mutuas presentes en cada vía. En algunas se promueve la sostenibilidad a expensas de la igualdad de género; en otras se promueve la igualdad de género y se pasan por alto dimensiones clave de la sostenibilidad. Dado que las vías son dinámicas, pueden tener también consecuencias sociales, tecnológicas y ambientales no buscadas, que influyan además en los resultados en términos de igualdad o desigualdad de género. Para sortear las dificultades que plantean estas dinámicas se requieren procesos de aprendizaje y deliberación inclusivos y formas de vigilar la exclusión, las concesiones mutuas y las oportunidades emergentes; también se exige tener presente en forma constante la política compleja en torno al género y la sostenibilidad.

Por último, el documento se ocupa de los desafíos políticos y normativos que conlleva la transformación de las vías orientadas a conseguir una mayor igualdad de género y sostenibilidad. Es fundamental fortalecer y perfeccionar las políticas e inversiones públicas; pero más allá de esto, y como complemento, hay un margen para forjar alianzas progresistas en torno al género entre actores públicos y privados, instituciones del estado y de la sociedad civil, y prácticas formales e informales. En última instancia, los movimientos feministas y las organizaciones colectivas, que han surgido en diversas modalidades y lugares del mundo, ofrecen en muchos casos la mayor esperanza tanto de hacer frente a las vías insostenibles como de trazar otras nuevas que nos conduzcan en direcciones más sostenibles y con mayor igualdad de género.

1.
INTRODUCTION

1.1

A time of challenges and opportunities

The twin challenges of building pathways to sustainable development and enhancing gender equality have never been more pressing. As the world embraces and begins to implement Sustainable Development Goals for the post-2015 era, this paper shows why each is so important, but also why they must be addressed together – in ways that fully embrace the politics of gender and of sustainability. It does so by putting forward a new 'gendered pathways approach' as a conceptual framework for addressing the interactions, tensions and trade-offs between different dimensions of gender equality and of sustainability – asking consistently 'sustainability of what, for whom?'.[1] We locate this approach in relation to evolving feminist and environment-related theories and practices over the last few decades. We show that integrating insights from feminist political economy and political ecology provides a guide to analysing current pathways of change and their implications and to appreciating alternatives.

Dominant patterns of production, consumption and distribution are heading in deeply unsustainable directions. In a world in which humanity has become a key driver of earth system processes, we are seeing over-exploitation of natural resources, loss of key habitats and biodiversity, and pollution of land, seas and the atmosphere. Scientific understandings are clarifying the huge social, environmental and economic challenges posed by threats such as climate change and loss of essential ecosystem services as humanity approaches or exceeds so-called 'planetary boundaries'.[2] Already, human interactions with the environment are producing unprecedented shocks and stresses – felt in floods, droughts and devastated urban and rural landscapes and livelihoods – while many people and places have suffered from a 'nexus' of food, energy, environmental and financial crises. These unsustainable patterns add to poverty and inequality, especially for the third of the world's population directly dependent on natural resources for their well-being[3], and create deep threats for future generations. And their effects often intensify gender inequality.

The causes and underlying drivers of unsustainability and of gender inequality are deeply interlocked. Both are produced by political-economic relations in late capitalism that support particular types of neo-liberal, market-led growth. These involve extreme privatization, financialization and concentration of capital; production geared to short-term profits; unfettered material consumption; and unprecedented levels of militarism – all at the expense of state regulation and redistribution, reproduction and care. As we elaborate in section 2, these political-economic relations rely on and reproduce gender inequalities, exploiting women's labour and provision of unpaid care, and often their bodies too. They are leading, in many settings, to crises of social reproduction while undermining people's rights and dignity. The same political-economic relations also produce environmental problems as market actors seek and secure profit in ways that rely on the over-exploitation of natural resources and the pollution of climates, land and oceans. Such market-led pathways are leading in directions that are unsustainable not only in social and ecological terms but ultimately in economic ones as well, undermining the conditions for future progress.

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1   Leach et al. 2010.
2   IPCC 2013, Rockström et al. 2009.

3   Unmüßig et al. 2012.

Growing international attention and debate now highlights the need to move economies and societies onto more sustainable paths, whether to avert crisis and catastrophe or enable prosperity through 'green economies'. Often missing in these debates, however, is a sense of the politics involved. The challenge is often seen in technical and managerial terms, as a matter of getting the technologies, prices and regulations right. This overlooks the more profound restructuring of social, economic and political systems that we may require to transform unsustainable patterns. Equally, 'sustainability' is often presented as if it were a clear, uncontested term. Yet many tensions and trade-offs arise: between finance for different kinds of low carbon energy, for instance, or between prioritizing food or biofuels in land use, or forests for carbon to mitigate global climate change or to meet local livelihood needs. How such tensions are addressed has profound implications for who gains and loses, both among social groups and between local, national and global interests. As this paper shows, many instances of policy and intervention today promote sustainability or green economy goals in ways that create tension with, or undermine, women's rights and gender equality.

Yet this is also a time of opportunity. Examples are accumulating around the world of alternative pathways that move towards sustainability and gender equality. Some are rooted in the everyday practices through which women and men access, control, use and manage forests, soils and urban landscapes in ways that sustain livelihoods and well-being. Others are evident in movements and collectives, many of them led by women, to build alternative food and resource sovereignty, agro-ecology, urban transitions or solidarity economies. While some of these offer alternatives or modifications within current capitalist relations, others suggest routes to more profound green transformations.

Linking gender equality and sustainable development is therefore vital for several reasons. First, it is a moral and ethical imperative: building more equitable gender relations that support the human rights, dignity and capabilities of women, intersected by differences of class, race, sexuality, age, ability and circumstances, is a central requirement of an ethical world order.

Second, the all-too-common pattern whereby women suffer most from environmental, climatic and economic shocks and stresses, undermining their vital roles in sustaining their families and communities, must be redressed to avoid them becoming victims. Third, and perhaps most significant, is the need to build on women's agency. Attention to gender offers routes to improve resource productivity and efficiency; to enhance ecosystem conservation and sustainable use; and to build more sustainable, low-carbon food, energy, water and health systems. Women have been and can be central actors in pathways to sustainability and green transformation. Yet crucially, this must not mean adding 'environment' to women's caring roles, or instrumentalizing women as the new 'sustainability saviours'. It means recognition and respect for their knowledge, rights, capabilities and bodily integrity and ensuring that roles are matched with rights and control over resources and decision-making power.

Here we respond to a growing consensus that gender equality and sustainable development can thus reinforce each other, in powerful ways.[4] Attending to gender differences and relations also provides a vital lens on and way to address the social and political, as well as economic and environmental, challenges and opportunities that must be core to pursuing sustainable development and highlights ways that women can be powerful agents of green transformation. Gender-focused and feminist analysts and movements have long provided strong and radical alternatives to patterns of unsustainability that promote gender inequalities as well as other forms of injustice. They call for a reimagining of sustainability in which gender equality is a key element and provide powerful tools to enable such alternative imaginaries and transformations.

This paper clarifies these challenges and opportunities by defining sustainable development, gender equality and the concept of 'pathways'. Building on the pathways approach developed by the STEPS Centre[5] as

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4   See Agarwal 2002, Buckingham-Hatfield 2002, UNDP 2012, Johnsson-Latham 2007.
5   The Social, Technological and Environmental Pathways to Sustainability (STEPS) Centre, funded by the Economic and Social Research Council (ESRC): www.steps-centre.org

a guide to thinking and action around sustainability challenges in a complex, dynamic world[6], it offers a conceptual framework for addressing the linkages and trade-offs between different dimensions of gender and of sustainability – a 'gendered pathways approach'. Using this, section 2 illustrates the inter-locking of gender (in)equality and (un)sustainability in diverse pathways related to the daily concerns of poor women and men.

Tracing interlinkages between gender and sustain-ability is nothing new, however. Section 3 reviews how diverse concepts – or narratives – about women, gender and sustainability have emerged and come to co-exist. Tracing the evolution of sus-tainability debates and related feminist theory in analysis and policy from colonial times to the pres-ent, we consider how and to what extent gender has been conceptualized and the gendered outcomes of sustainability-focused policies and programmes. Re-visiting a longer history of sustainability thinking and

feminist scholarship highlights problems to avoid and potentials to build on in developing a fully 'gendered pathways approach'. Based on this review, section 4 elaborates this approach more fully, drawing par-ticularly on insights from feminist political economy, feminist political ecology and studies of gendered subjectivities and embodiment.

The final section addresses the policy and political challenges of transforming pathways towards greater gender equality and sustainability. Strengthening and refining public policies and investments is key; but beyond and complementing these lies scope to build gender-progressive alliances between public and private actors, state and civil society institutions, and formal and informal practices. Ultimately, feminist movements and collective organizing, emerging in diverse ways and places across the world, may offer the greatest hope for both challenging unsustainable pathways and charting new ones that lead us in more sustainable, gender-equal directions.

1.2

Conceptualizing sustainable development, gender equality and pathways

Sustainability, and sustainable development, are his-torically changing and much-debated concepts. Since the 1990s, mainstream views have generally defined sustainability in normative terms to refer to a broadly identifiable set of social, environmental and economic values. Our definition is broadly in line with the view, since the 1987 World Commission on Environment and Development report,[7] that sustainable develop-ment should 'meet the needs of the present without compromising the ability of future generations to meet their own needs'.[8] This involves integrating three 'pillars' of sustainability: environmental, economic and social. Yet we go beyond these broad emphases in several important ways. First, we highlight the need to be more specific about the values and goals at stake

around different issues and contexts, across temporal and spatial scales and according to the perspectives and priorities of different groups. There may be multi-ple possible sustainabilities at stake, and negotiating these is a political and not just a technical and mana-gerial challenge. Second, in such negotiations the social dimensions of sustainability – too often played down or ignored – must be fully integrated. And third, we must attend to equity not just across generations but also within them. Here, gender equity and equal-ity are central.

In this paper, then:

Sustainable development is development that ensures human well-being, ecological integrity, gender equality and social justice, now and in the future.

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6   Leach et al. 2010.
7   Generally known as the Brundtland report after its chair, Gro Harlem Brundtland, former Prime Minister of Norway.
8   Ibid: 43.

Pursuing sustainable development for all requires upholding human rights principles, widening freedoms and promoting peace – in combination with respect for the environment. It requires redressing discrimination and disadvantage at household, local, national, regional and global levels.

This in turn requires re-directing interconnected environmental, economic, social and political processes, challenging current unsustainable pathways of production, consumption and distribution and finding new ones. It requires action and accountability by the state, civil society, the private sector, communities and individuals, building alliances to transform institutions and power relations and democratize knowledge.

In this conceptualization, gender equality is therefore integral to how sustainable development is defined and pursued. We consider gender equality not just in relation to women and men but also in intersectional terms, attentive to the ways that gender intersects with class, race and ethnicity, sexuality, place and other significant axes of difference.[9] The concept of substantive gender equality emphasizes the importance of human rights, capabilities and the ways these intertwine and overlap.[10] Building on this, we conceptualize multiple dimensions to pursuing gender equality including:

a) **Redressing socio-economic disadvantage in the domains of work, well-being and access to resources.** This includes ensuring equal access to decent work and secure livelihoods; the recognition, reduction and redistribution of unpaid care work; equal access to quality education, health and other social services and public goods; and equal access to and control over resources and their benefits – including ecosystem-based resources.

b) **Enhancing recognition and dignity.** This includes challenging stereotypes around masculinity and femininity; assuring freedom from violence and violations of dignity and security; assurance of bodily integrity and sexual and reproductive health and rights; and recognition and respect for diverse forms of knowledge production and application.

c) **Enhancing equal participation in decision-making at multiple levels.** This includes supporting agency, power and voice in institutions and decision-making; building deliberative forms of democracy that can debate sustainability goals and values in inclusive ways; and assuring space for feminist collective action.

Gender equality ultimately requires the realization of all human rights (e.g., rights to food, water and sanitation and livelihoods as well as to bodily integrity and security). Rights on their own are often not enough; making them real also requires recognition and respect[11], power and voice, and challenges to dominant institutions and forms of knowledge. It is here that we see the critical role of collective action and women's mobilization in challenging stereotypes, in making States accountable for the realization of rights and in providing alternatives.

Our gendered pathways approach helps in conceptualizing how institutions, power and knowledge can interact to create and sustain pathways that are either unsustainable or – alternatively – offer routes to sustainable development and greater gender equality. We elaborate this gendered pathways approach fully in section 4, integrating insights from feminist theory and practice. Here, we note that the approach builds on the pathways approach developed through the work of the STEPS Centre.[12] This starts with a normative approach to sustainability, conceptualizing it as combining ecological integrity, human well-being and social justice. Congruent with our concerns here, then, the pathways approach can embrace concerns with gender as a dimension of social justice, although until now – and in the variety of applications of the pathways concept – gender has not necessarily been explicit or centre stage. Pathways, in general, are understood as alternative directions of intervention and change. They refer to the ways that 'systems' or assemblages of social, political, economic, institutional, ecological and

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9   Shields 2008, Valentine 2007, Yuval-Davis 2006.
10 Goldblatt and McLean 2011, Vizard et al. 2011.

11 Fraser 2013.
12 Leach et al. 2010, Scoones et al. 2015.

technological processes, interacting in dynamic ways in particular environments, might develop over time.

Such systems operate at different scales. Thus a local example might be the interactions of land and tree ecologies, gender divisions of labour and responsibility, and cooking technologies involved in fuelwood use. Nationally, we might be concerned with the interactions of state policies and markets involved in food systems. And a global example might be the interactions of dynamic climate processes with international regulation, carbon market schemes and finance aimed at curbing greenhouse gas emissions and impacts. Yet most sustainability challenges involve interactions across scales. Thus we might be concerned with the impacts of global climate processes on local land ecologies and uses, or with the ways that household, state and market institutions interact to shape the dynamics of food access. Pathways might involve systems moving in unsustainable directions or, alternatively, towards sustainability.

Central to the pathways approach is recognizing that there are multiple ways of understanding and representing – or 'framing' – systems and change. Issues such as which scale is important, which processes are highlighted, the nature of problems and possible solutions, and which goals or dimensions of sustainability to highlight, can all be framed in different ways. Different actors – whether local people or scientific, policy or business actors – will often hold different views, depending on their particular backgrounds, perspectives, interests and values. Framings often become part of narratives about a problem or issue: underlying storylines with beginnings defining the problem, middles elaborating its consequences and ends outlining the solutions.[13] 'Labelling' of particular people and groups – as responsible for the problem or key to the solution – is often part and parcel of this.

Most sustainability issues involve multiple, contested framings and narratives. Thus, for example, environmental problems may be attributed to rising populations in Malthusian narratives that blame women's excessive fertility or, alternatively, to political-economic processes that lead to poverty-related resource degradation. Food sustainability challenges may be framed as problems of production, to be solved by new agricultural technologies and enhanced markets, or in terms of distribution, access and entitlements. Narratives, as we shall see, implicate gender and women in highly contrasting ways. The point is that not all narratives are equal; some dominate, supported by powerful institutions and relations, while others remain marginalized or hidden. And narratives have material consequences: they underpin and legitimate particular policies, institutions, interventions and patterns of investment while excluding others.

Narratives, institutions and political-economic processes thus interact to shape pathways towards or away from sustainability. Such shaping depends on politics and institutions: 'governance' in the broadest sense.[14] Public, private and civil society actors all play roles in such governance, interacting in ways shaped by power relations. The pathways approach turns to diverse analytical traditions to untangle such power relations, combining attention to material political economy with an appreciation of the politics of knowledge and discourse.[15] In some cases, pathways may appear to be 'steered'; powerful actors and institutions might, through their policies, interventions or investments, lead assemblages to co-evolve in particular directions. Yet the pathways approach also acknowledges 'cultured' pathways that emerge from the multiple actions and practices of diverse people and groups and from a combination of agency and contingency.[16] In any setting, there is a plurality of possible narratives and pathways, moving towards and away from sustainability or towards particular versions of sustainability. The pathways approach urges that this diversity is unpacked, recognized and appreciated. The question of 'sustainability of what, for whom' must be asked of each possible pathway, and tensions and contestations between them spelt out and explored.

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13 Roe 1994.

14 Leach et al. 2010.
15 Scoones et al. 2015, Leach 2015.
16 See Stirling 2015.

Yet only some potential pathways become real or are manifested in actual change. Of all the diverse pathways that are typically viable in any given setting, various self-reinforcing dynamics typically mean that only a few 'lock in'. Many others are 'crowded out'. The strongest pressures 'close down' attention around those pathways that are favoured by the most powerful interests. The pathways approach – and the methodologies with which it has co-evolved[17] – thus emphasizes the importance of looking beneath the dominant 'motorways' to recognize and validate alternatives: the bush paths or faint footprints of the global development scene. The fundamental challenge is to find ways to 'open up' this politics of pathways so as to appreciate alternatives – including those that might favour the perspectives and priorities of otherwise marginalized groups. In this vein, the pathways approach and its methods have been applied both as an analytical framework as well as part of 'co-constructed' research and policy processes to facilitate reflection, deliberation and action with societal stakeholders. In this, those making use of the approach are also encouraged to reflect on their own positionality, questioning their own assumptions and narratives and opening these to challenge – an edict that we as authors take seriously in this paper.

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17   See: http://steps-centre.org/methods/.

2.

PATHWAYS OF (UN) SUSTAINABLE DEVELOPMENT AND GENDER (IN)EQUALITY

2.1

Pathways away from sustainability and gender equality

Our arguments in this paper are framed by growing evidence that dominant pathways of development are unsustainable in economic, social and environmental terms. The decades since the 1950s have seen huge growth across many indicators of production and consumption.[18] The global economy has increased by more than a factor of 15, and real world gross domestic product (GDP) grew from US$2 trillion in 1965 to US$28 trillion in 1995.[19] This has depended, for the most part, on a development model focused on market-led economic growth under late capitalism. It is supported by powerful narratives, deeply entrenched among many international agencies and market actors, that depict economic growth as the core goal and market-led approaches as the best way to achieve this. Such narratives have co-developed with patterns of production and consumption generally geared to increasing monetary accumulation. Hyper-consumption and materialistic lifestyles are encouraged. Neo-liberal policies and logics emphasize the pursuit of private profits by firms and individuals in markets left as free as possible from state involvement. Business competition and free trade are encouraged, nationally, regionally and globally, but monopolistic

practices are left largely uncurbed. There is increased financialization of many resources and sectors of the economy – and trade and speculation in those financialized resources. While there is obviously variation between countries, regions and sectors, much of this lies within the broad parameters of a market-oriented, neo-liberal growth model.

Increasingly, though, the economic sustainability of such pathways is in question. Financial crises and recession, taking hold in many countries and sending shock-waves around a globalized world, have laid bare the risks and vulnerabilities, the bubble-like and boom-bust tendencies inherent to financialized market models, which undermine their viability even on their own terms. The fruits of this growth have also been deeply unequal. As GDP has grown, the economic disparities between countries and regions and within individual societies have increased. The poorest 20 per cent of the world's population control only 2 per cent of global income[20], while the world's most rapidly growing economies – including the rising powers of Asia, South Africa and Latin America – have also seen rapid increases in inequality. Inequality itself threatens economic sustainability, fuelling unrest and

18 Steffen et al. 2004.
19 ibid., Reed and Rosa 2000, UNEP 2000.

20 Unmüßig et al. 2012.

conflict and undermining the stability, level playing field and consumer demand on which growth relies.[21]

Many dominant market-led pathways are also socially and environmentally unsustainable. Indeed mainstream neo-liberal models rely on, and thus perpetuate, both gender inequality and pollution and over-exploitation of the environment. In terms of gender, a central dynamic is the way dominant models rely on a separation between productive and reproductive labour – the latter including unpaid and volunteer labour for care, subsistence and reproduction, much of it carried out by women. While productive labour is valued, capitalist pressures often force wages down. Growth in many areas of industry and commercial agriculture has unfolded along with a feminization of labour.[22] While economic globalization has created employment opportunities for women across various classes, many of these have been provided within and reproduce patterns of discrimination and segregation that are embedded in labour markets. Thus poorer women undertake work that is seen to be an extension of their traditional gender roles: in low-end retail jobs, domestic service, assembly lines and labour-intensive agricultural work. Such jobs tend to be characterized by low wages, instability of employment and poor working conditions. Many are informal. They reinforce the status of women as secondary earners within their households and may remain invisible within the economic system.[23]

Even more significantly, capitalist markets and production can continue to function as they do only because they constantly make use of unpaid labour, mostly by women, in caring for children, the sick and the elderly. Nancy Folbre argues that market economies are sustained not by the 'invisible hand of the market' alone but also by the 'invisible heart of care'.[24] The nature of work that underlies care, and the fact that it is unpaid, often essentializes women as caregivers. Women's obligations to fulfil these socially prescribed roles not only puts the burden and stress on them but also limits their opportunities, capabilities and choices to participate in paid employment outside the home, with negative consequences for their rights, dignity and status. This care work, which is essential to reproduce both the labour force and wider communities and societies, is consistently ignored, undervalued or 'externalized' in capitalist economic models. Gender inequality is therefore a constitutive element of this dominant development model and reinforced through it. However, by eroding the values of care and social security, and by over-exploiting human 'capital', this model risks becoming socially unsustainable.[25] Indeed there is growing evidence of an emerging crisis of social reproduction as people and communities struggle to provide adequate care for small children to build the next generation.

In ecological terms, people and their activities have become the dominant drivers of change, globally and locally, in the so-called 'anthropocene'.[26] Mainstream models of capitalist growth rely on the exploitation of natural resources as if these were unlimited, and on 'externalizing' the environmental costs of production – such as pollution and the release of greenhouse gases. Competitive pressures have led firms and market actors to a relentless search for economic efficiencies at the expense of nature. Economic incentives, technologies, infrastructures and political institutions have combined to create and 'lock in' pathways that create profit at environmental expense – whether the entrenched fossil fuel systems that dominate energy supplies while creating carbon emissions and climate change, or commercial agricultural schemes that create short-term gain by over-exploiting soils and water supplies. Such pathways are unsustainable in their own terms, threatening to run up against resource limits that will undermine future production and consumption. They threaten the integrity of ecosystems, damaging water, soil, biodiversity, vegetation and air and reducing their life-supporting capacities, resilience and robustness. Declines in ecosystem services and productive capacity undermine people's livelihoods and health in the present and threaten future generations. Local ecosystem degradation often interacts with global threats and processes – in

21   Stiglitz 2012.
22   Barrientos and Evers 2013, Berik and Rogers 2009.
23   Seguino and Grown 2006, Braunstein and Houston 2015.
24   Folbre 2001.

25   Razavi 2006.
26   Steffen et al. 2004.

climate and ocean systems, for example – resulting in shocks and stresses such as floods and droughts that further damage both ecosystems and the people and activities that depend on them.

By ignoring social and ecological dimensions to growth, the political economy of neo-liberalism and the narratives that underpin it thereby destroy its own living foundations – humans and nature – through overexploitation.[27] The capitalist market economy drives a constantly intensifying use of human, social and natural resources in a vicious cycle of growth in which hyper-resource extraction, production and consumption reinforce each other. In order to increase profits, capitalist production shifts social and ecological costs onto private households and local communities, or onto nature, in pathways that rely on and perpetuate gender inequality. In this process, local ways of living with environments in socially and ecologically sustainable ways – whether in rural or urban settings, among pastoralist, agricultural or forest communities – are often ignored or undermined, along with gendered local knowledge of ecologies and ways to manage them.

The costs and consequences of environmental change are also felt in gendered ways that can further fuel inequality. Disasters, including those related to climate change, often disproportionately affect poor women.[28] Women often bear the brunt of coping with climate-related shocks and stresses, or the health effects of urban pollution, adding to their care burdens. As land and forest resources once held in common are increasingly enclosed, privatized or 'grabbed' for commercial investment, poorer women and indigenous people who often depend on these places to produce and gather food and fuel for subsistence and incomes find themselves marginalized and their livelihoods, rights and status further undermined. As scarcities of land, food, energy and water – created by their privatization and over-exploitation in competitive markets – interact and intensify, the resulting 'nexus' of pressures is also felt in gender-differentiated ways. Women struggle to sustain livelihoods under more

constrained conditions, adding to care burdens and threatening their health and status.

Policy makers and businesses seek to respond to environmental change within a neo-liberal development model in ways that enable carbon, biodiversity and other ecosystem services to be traded in markets, payment and offset schemes.[29] While such schemes aim to 'put a proper price' on natural capital, so it can be included within rather than externalized from economic calculations, the markets that have resulted have often proved to work against the interests of the poor and women and have further intensified resource pressures through land, water and green 'grabs'.[30]

The rise and character of militarism adds a further dimension to pathways of unsustainability and gender inequality. The financial, political and policy relationships that link government agencies, armies and the industrial base that supports them – the military-industrial complex – is a pervasive feature of late capitalism. Spending on defence dwarfs that on social or environmental investments in most countries. Concerns with national military security and defence encourage environmental change to be addressed in terms of its threats to national security – as when climate change is seen to create problematic environmental refugee flows across borders, or armed conflict is attributed to resource scarcity. This military 'securitization' takes attention, policy and investment away from the social – and gender-related – causes and impacts of environmental change. Meanwhile military interventions are associated with the perpetuation of violence in ways that rely on and entrench patriarchal values and often damage women's rights, dignity and bodily integrity.

Such mutually reinforcing pathways interact with powerful narratives in ways that obscure their troubling intersections, hiding them under a gloss that the neo-liberal model can continue unproblematically and only needs to be implemented with greater force. In this way, and as the pathways approach would highlight, one can identify a 'lock-in' to powerful, market-oriented

27 Wichterich 2012.
28 Neymayer and Pluemper 2007.

29 Leach et al. 2015.
30 Fairhead et al. 2012, Mehta et al. 2012.

development narratives and pathways. Both ecologies and women/gender equality can be seen as victims.

Yet we also need to be careful of victim narratives. They may present powerful ways to capture attention and potentially resources, and indeed we ourselves have used them as such in the framing we have laid out above to capture the reader's attention and emphasize the pressing character of this paper's concerns. Knowledge politics pervade all analysis, and we are reflexively aware of this. In line with the pathways approach and critical feminist analysis, therefore, we now 'open up' to look beneath and beyond this powerful narrative and pathway to see what is obscured.

2.2
Alternative narratives and pathways

What we find is that alternative pathways that move in sustainable directions – economically, socially and environmentally – are possible. They are evident in many places and around many issues and sectors, and they are underpinned by alternative narratives that emphasize not just profit and growth but the importance of sustainability, inclusivity and social justice. In these, diverse women and ecologies appear not as victims but often as agents in alternative socio-natures: agents of change. Typically, these pathways do not rely solely on markets; instead they involve different combinations of public, private and civil society action and institutions and usually require strong state action. Social movements are key in initiating and demanding these pathways and in shaping forms of collective action that maintain them. And States play central roles: providing appropriate policy contexts, regulating standards and resource use, holding private actors to account and, crucially, providing the public services and investments that are critical for social and ecological sustainability.

For example, in relation to work, we see new public and private alliances pushing for and building green economies and green transformations. Here, pathways are emerging that link financing, technologies and investments in areas such as low carbon and renewable energy towards styles of growth that respect ecological limits. Meanwhile social movements, questioning whether continued high growth rates and market systems can ever be sustainable, are pioneering alternative pathways around ideas of sufficiency, solidarity and well-being.

In relation to food, we see pathways emerging that focus on securing the right to food. These include policy and public support to needs-oriented smallholder farming, enabling small-scale farmers to secure ecologically sound cultivation, maintain soil fertility and ensure their livelihoods. Successful pathways often incorporate local knowledge of ecological conditions, soils and seeds, cooperatives for production and marketing, and support such as credit to enable poorer farmers to access appropriate inputs. Pathways to support food access and rights also benefit from state interventions – for instance, in setting minimum wages, labour market policies and price regulation and in negotiating internationally around issues such as export subsidies and the maintenance of reserve stocks to offset price volatility. Social movements such as the Food Sovereignty movement are campaigning actively for such structural changes to the political economy of food, while demonstrating alternative pathways centred on local food system autonomy and sustainable agro-ecological practices.

Furthermore, there are different ways through which the poorest people can secure rights to products and services that meet essential everyday needs for water, sanitation and clean cooking. These bring vitally important benefits both in environmental sustainability and in enhancing people's capabilities, dignity and health. Public investment is key to such pathways, but so too is innovation to find appropriate water, sanitation and stove technologies and attune them to local social and ecological conditions. Local knowledge and grass-roots innovation and action therefore prove

to be key for these pathways too. The challenge is then to scale up equitably while maintaining a focus on gender justice and sustainability, and here state and public policy interventions are critical.

Women are central to many of these alternative, sustainable pathways. They are often at the forefront of social movements resisting unsustainable pathways and demanding alternatives. Their knowledge, action and agency are critical to finding, demonstrating and building more ecologically, economically and socially sustainable ways forward, whether to manage local ecologies, adapt to climate change, produce and access food or secure sustainable, appropriate water, sanitation and energy services.

In some cases, women's centrality is recognized in policy and politics. Thus governments and donor agencies target women as key in community adaptation to climate change due to their reproductive capacities, seen as central to addressing assumed population-environment problems, and their productive capacities as smallholders, the key to sustainable food production. Indeed narratives that see women as 'sustainability saviours' are evident in many areas of debate, from those focused on green care economies or population-environment linkages, to those addressing conservation of climate, biodiversity, water and soils to those building socially and environmentally sustainable services.

Yet such narratives are again often partial, and they carry dangers. The idea that women are central to ecology-related social movements, for instance, has become something of a truism. On closer examination, however, the examples cited – such as the celebrated La Via Campesina and food sovereignty movements – often prove not to involve women centrally at all. In other cases, such as in climate change adaptation, policy makers and donors adopt a narrow,

technocentric conceptualization of gender. They often assume, again, that women will supply unpaid care and reproductive work – sustaining people and ecologies – without granting this due recognition, support and consideration of redistribution with men and others. Narratives of women as sustainability saviours treat 'women' as homogeneous, ignoring the vital intersections with class, ethnicity, age and identity that shape their interests, knowledge, values, opportunities, capabilities and rights. They ignore the gender relations – in rights, resource access and control, voice and power – that shape whether women's action and work towards economic or environmental sustainability translate into benefits – in enhanced rights, capabilities, dignity and bodily integrity. Thus women's involvement in pathways to sustainability does not necessarily mean greater gender equality; on the contrary, as the examples of population and agriculture show, 'instrumentalizing' women to save the planet can entrench and worsen gender inequalities.

This is why it is important, always, to attend to the politics of sustainability – asking 'sustainability of what, for whom' – and to avoid trade-offs in which economic or environmental sustainability is secured at the expense of gender equality and women's rights and capabilities. Sustainable development, as we define it, must include gender equality as integral; the challenge is to identify and support alternative sustainable development pathways that support gender equality and women's rights, voice and bodily integrity. This requires analysis and action based on a truly gendered pathways approach.

What areas of theory, policy and debate are most helpful in developing and enriching such an approach? The next section examines the intellectual underpinnings of a range of key concepts and policy debates around sustainability and sustainable development, considering how gender has been conceptualized within these.

3.

GENDER AND SUSTAINABLE DEVELOPMENT: REVIEWING CONCEPTS AND DEBATES

Even though 'sustainability' has become a key concept guiding global, national and local institutional frameworks, policies and interventions, the concept is ever-changing and deeply debated and contested. Gender has been variously ignored by, or incorporated into, conceptualizations and policy debates in a diversity of ways. A brief review highlights the historical roots of some key concepts and approaches that continue to co-exist and compete today, albeit in contemporary forms. Drawing together a chronology of environmental policies and action with evolving feminist perspectives on these, we chronicle – albeit in outline – a rich history of work on gender, environment and sustainable development over the last 30 years, with feminist theory co-evolving with feminist movements. Many of these approaches offer vital insights, principles and ways to enrich our gendered pathways approach, offering valuable potential for the design of policies and interventions and fostering a progressive politics of sustainability and gender equality. Yet, other conceptualizations are problematic and when applied in practice – including those mobilized as narratives by feminist policy makers at particular policy moments – have worked against gender equality and sometimes sustainability too. For each sub-section, we highlight positive contributions and insights, drawbacks and dangers in theory or when translated into policy, projects or practice as well as potential aspects to take forward into a gendered pathways approach.

3.1

Feminist perspectives on colonial and neo-colonial policies

The term 'sustainability' was first coined in an environmental context by a German forester[31] to prescribe how forests should be managed on a long-term basis. This early emphasis on conserving economically valuable natural resources remained a key thread in the environmental policies that emerged amidst subsequent periods of imperial and colonial expansion and consolidation in the 19th and 20th centuries. Many practices, policies and interventions in this period were geared narrowly to economic profit for European powers and colonial States. These often focused on rapid exploitation of natural resources in most parts of Africa, Asia and Latin America. The social consequences of such policies and practices were frequently devastating, associated as they variously were with the taking of land and livelihoods from local women and men and with exploitative and degrading labour practices.

The effects of colonial policies have been analysed from feminist perspectives. A dominant mode of analysis draws on ecofeminist ideas, which we explore in more detail later. Suffice to say here that ecofeminists such as Vandana Shiva (1988) and radical feminists such as Maria Mies and others[32] argued that the colonial period led to the domination of women and nature. For Shiva, colonial development in India led to the subjugation of a 'feminine principle', inherent in pre-colonial India, that allowed for harmony with nature and equitable social and gender relations. Appfell-Marglin and Simon (1994) also speak of the need to look at alternative ways of life that existed in Orissa, India in which nature and women's bodies were more fully valued and seen as embedded in socio-cultural processes. In the African context, Esther Boserup (1970) highlighted the key role played by women in pre-colonial African farming systems, many of which were matrilineal. Such viable female-led farming systems were often overridden by colonial assumptions of male household headship. In the

1980s, radical German feminists such as Mies (1986) and her collaborators of the 'Bielefeld school' engaged with and went beyond Marxist thinking to argue that capitalism led to the exploitation of both women's labour and women's bodies. For them colonialism was an extension of the patriarchal-exploitative model onto the non-European world. Thus Mies and Shiva (1993) characterize imperialism and colonialism as bearers of a particular Western, mechanistic science and rationality, seeing this as patriarchal or 'masculinist' and 'doing violence' to women and nature.

While Shiva, Mies and others have provided powerful feminist critiques of colonialism and its exploitative nature, their sweeping arguments have been critiqued for over-generalization and a tendency to romanticize pre-colonial or gathering societies. In contrast, historical and anthropological analyses have highlighted, for example, how Indian caste relations, even in pre-colonial times, were always highly hierarchical and exploitative. Furthermore, the tendency to essentialize relationships between women and men and their 'natural' relationships with nature in these works would not stand up to rigorous cross-cultural historical and anthropological scrutiny. Other anthropological and historical analyses, while critical of such generalizations about femininity and nature, nevertheless highlight diverse ways of living sustainably with dynamic local ecologies to which women were often central.[33] They have documented the complex and variegated gender relations in these systems, the gender-differentiated effects of colonial policies[34] and women's tactical negotiations in response.[35]

In the early 20th century, specific colonial environmental policies began to emerge. Their roots and motivations included aesthetic and moral desires to preserve an imagined, remaining pristine nature and wilderness in the tropics. Colonial conservation

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31   Von Carlowitz 1712.
32   Mies 1986, Mies et al. 1988.

33   See Appfell-Marglin and Simon 1994, Boserup 1970
34   Mackenzie 1998.
35   Allman et al. 2002.

policies and practices ranged from forest reserves and 'scientifically managed' plantations to protect supplies of commodities such as timber and rubber[36] to watershed protection policies and the creation of wildlife reserves.[37] They were frequently justified by narratives that local populations were incapable stewards of natural resources, whose 'primitive' agricultural hunting, gathering and fire-setting practices caused environmental degradation. The practices of colonial science and administration often went hand-in-hand to label local people as environmental destroyers, justifying their removal, restriction or re-education.[38] Thus people whose lives, societies and livelihoods had co-evolved with the management and use of local ecologies, in ways that were highly sustainable in local terms, often found themselves dispossessed of land and resource access and use by 'fortress'-like enclosures and laws, with devastating effects on their well-being, rights and freedom.[39] Although these effects were highly gender-differentiated[40], this went largely unacknowledged in colonial policies that, whether in the economic or environmental field, assumed undifferentiated populations and male-headed households – prompting varied and tactical negotiations by women.[41]

This colonial legacy continues to present times and in diverse regions of the world. Thus in Southeast Asia, Dove et al. (2011) and Hall et al. (2011) document how processes of territorialization and sedentarization by States in the name of environment and development 'progress' have marginalized and criminalized land users. Forms of economic development that dispossess people of rights and livelihoods still abound, such as large dams – now often justified as bringing environmentally 'clean' hydropower – with negative environmental as well as social and gendered impacts.[42] Neo-colonial 'fortress'-like conservation policies and enclosures continue to be implemented in areas such as forest and wildlife conservation.[43] Moreover, the last decade has seen a new wave of large-scale foreign investments in parts of Asia, Africa and Latin America in commercial crops and biofuels for export. Although the actors and dynamics are different, these global land, water and 'green' grabs – and the narratives of local resource mismanagement that underpin them – offer striking similarities to the dispossessions of the past.[44] Recent work highlights these continuities in contemporary land grabbing while putting forward gendered analysis of their effects on land, labour and decision-making relations.[45]

More broadly, critical analysis of colonial and neo-colonial environmental policies and interventions highlights that protecting the environment based on a notion of pristine nature will invariably have negative consequences for local livelihoods and have differentiated impacts on women and men. The colonial period also illustrates the start of emerging tensions between the 'economy' and the 'environment' and serious trade-offs between environmental protection, livelihood generation and economic interests. Unpicking gendered effects of dispossession, and bringing to light alternative pathways, is more critical than ever.

36 Sivaramakrishnan 1999.
37 Anderson and Grove 1987.
38 Fairhead and Leach 1996, Leach and Mearns 1996, Beinart and McGregor 2003, Adams 2004.
39 West et al. 2006, Brockington et al. 2008.
40 See Mackenzie 1998, for example.
41 Allman et al. 2002.

42 See Mehta 2009.
43 West et al. 2006, Brockington et al. 2008.
44 Fairhead et al. 2012, Mehta et al. 2012.
45 See Levien 2015, Julia and White 2012.

3.2

Social and environmental movements

The 1960s and 1970s saw the rise of environmental movements and environmental non-governmental organization (NGOs) that were, in part, responding to such tensions. In the global North, environmental movements focused largely on the effects of economic growth and policies on pollution, resource depletion and species and habitat loss. Together with cornerstone publications – for example, *Silent Spring* pointing out the drastic ecological consequences of the use of chemical pesticides such as DDT in industrial agriculture[46] – and debates about resource-based 'Limits to Growth' (Meadows et al. 1972), environmental movements fuelled a growing public and political consciousness of the environmental costs associated with the many material benefits brought by dominant economic growth patterns. The 1973 and 1979 energy crises demonstrated the extent to which the global community had become dependent on non-renewable energy resources and also highlighted globally interconnected capitalist and environmental processes. Nevertheless, Malthusian perspectives often dominated, relating resource depletion simply to population and technology and highlighting the threat of rapidly growing, resource-consuming populations.[47] Their gendered impacts were often pernicious, leading to increased domination over women's bodies through population control programmes.[48] Meanwhile, and in some contrast, Esther Boserup's landmark publication *Women's Role in Economic Development*[49] focused on gender-specific

roles, rights and responsibilities in agriculture and the need to integrate women more centrally into the economy and development; this formed the basis for women in development (WID) and women and the environment (WED) thinking, to be discussed shortly.

Social and environmental movements in Asian, Latin American and African settings, in contrast, mainly focused on the negative impacts of economic and environmental policies on local livelihoods and the protection of local social and indigenous people's rights and well-being. 1970s examples include movements resisting large dams and displacement, mining and forest destruction.[50] The 1974 Chipko movement resisting industrial logging in the Himalayas was primarily a livelihood-protection movement but went on to become a celebrated exemplar and symbol for non-violent environmental protest and women's roles in it. Similar symbolism attached to Kenya's Green Belt Movement founded by Wangari Maathai in 1977, which encouraged rural women to work together to plant trees for livelihoods and conservation. Women's central involvement in many movements encouraged analysts later to make stereotyped linkages between women and 'nature'. Nevertheless, most shared a general and important narrative critiquing dominant economic development pathways and their social and gendered consequences and put forward alternatives. This set the stage for many further forms of feminist mobilization for sustainable development up to the present.

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46 Carson 1962.
47 Ehrlich 1968.
48 See Hartmann et al. 2015.
49 Boserup 1970.

50 Doyle 2005.

3.3

Sustainable development, WED and ecofeminism

Against this backdrop, it was in the 1980s that the term 'sustainability' came into wider currency in efforts to show how environmental issues might be linked to mainstream questions of economic and social development. *Our Common Future,* the landmark 1987 Brundtland report established the still most widely accepted concept of sustainable development discussed earlier. This linked sustainability firmly to questions of human economic and social needs, 'in particular the essential needs of the world's poor, to which overriding priority should be given'.[51] Valuably, the three pillars of economy, society and environment were to be integrated with an emphasis on poverty reduction. The report also highlighted not just static environmental limits but how these are shaped by technology and social organization. The report's definition thus opens the way for a concept of sustainability that integrates questions of environmental integrity with human well-being and for normatively defining development pathways towards this.

However, in its static notion of 'needs', the concept stops short of any concern with capabilities, rights and justice as goals of sustainable development. The focus on inter-generational equality, while valuable, downplays concern with (in) equality within generations – whether by gender, age, ethnicity or place. Needs and limitations remain vaguely defined, which leaves open (and thus depoliticizes) questions of which precise aspects of environmental integrity and human well-being are at stake. Thus silenced are the political debates and trade-offs that might occur about which matter to whom and how to prioritize across different people (including by gender), places and scales. The Brundtland report also paid little attention to gender equality and women's rights, apart from some acknowledgement of issues concerning fertility, family planning and housing.

In the 1980s, a plethora of documents and publications by scholars, NGOs and donor agencies emerged on women, the environment and sustainable development. They put forward a strong view that women were the primary users and managers of the environment at the local level. Indeed, what came to be termed the 'women, environment and development' (WED) approach was a translation of women in development (WID) perspectives into the environmental domain. WED discourse valuably highlighted the significance of the environment to women's lives and livelihoods at the most local level. This is in sharp contrast to contemporary, globally focused debates on planetary boundaries, the green economy and so on, as we shall see. It also played a key role in highlighting that environmental degradation comes at a particular cost for women and girls and provided a strong critique of patriarchal relations and dominant economic development and growth paradigms.[52]

However, as with WID, the focus was almost exclusively on women's activities, with men barely appearing in the picture. Like WID, the starting point was the gender division of labour and a somewhat homogenous view of women and static conception of their roles, ignoring the ways in which these are shaped by gender and social relations. There was also a tendency to advance the notion that women-environment connections were natural and universal. It was argued that women's work – especially in reproductive and subsistence-focused activities – involves them closely with the environment and its resources, as hewers of wood, haulers of water and cultivators of food. While in the early 1980s there was much emphasis on women as victims of environmental degradation (an image that still persists around the impacts of climate change), by the end of the decade far more prominent was the positive image of women as efficient environmental managers and conservers of resources.

In practical terms women came to be seen as the prime movers in environmental conservation. At one extreme, the World Bank developed a 'synergistic' or 'win-win' approach to environment and gender, arguing for a general identity of interest between women

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51   World Commission: 43.

52   See Harcourt 1994.

and environmental resources.[53] At the other, women were conceptualized as the central agents of primary environmental care, which linked caring for the environment, meeting basic needs and community empowerment. When translated into development practice, this led to the mobilizing of women's labour, skills and knowledge, often unpaid, and therefore adding to their existing chores and burdens. Many of the projects and programmes that built on these assumptions have proved counterproductive for women or have failed to conserve the environment, or sometimes both. Project 'success' was often secured at women's expense by appropriating their labour, unremunerated, in activities whose benefits they did not control. This trend has continued more recently in approaches to population and environment and to green/care economies. Nevertheless, it should be acknowledged that the local livelihoods focus of WED highlights alternative pathways to dominant global policy debates, which tend to ignore local realities. The detailed focus on women's activities and roles in environmental management also shows how pathways both depend on and might enhance specific gendered roles and responsibilities.

WED also had strong synergies with ecofeminism, which emerged as a powerful discourse in the late 1980s and early 1990s based on the notion that women are especially 'close to nature' in a spiritual or conceptual sense. Ecofeminism has many strands, with some taking an essentialist position, attributing the connection between women and nature to biological attributes, and others seeing it as a social or ideological construct. As described earlier, ecofeminists argue that women and nature have been subjected to a shared history of oppression by patriarchal institutions and dominant western culture. Carolyn Merchant's (1980) work made links between the scientific revolution of the 17th century and the ways in which technology was often deployed to subjugate nature and women, while the work of Vandana Shiva was particularly influential in bringing a global developmental presence to these debates. Ecofeminism's primary assumption is that women have a special relationship with nature and that violence against nature goes hand in hand with violence against women. Thus, hope for environmentally sustainable and egalitarian development lies in viewing people and 'nature' as interdependent and grounded in the recovery of the 'feminine principle'.

Ecofeminism was always, and remains, multi-stranded. While some versions can be rightly critiqued for their universalizing and essentializing tendencies, others are more nuanced and draw inspiration from recent areas of thinking that we discuss later, such as new feminist political ecologies.[54] Yet it was the essentializing versions that were picked up in WED debates. The so-called natural linkages between women and nature sometimes served in the 1980s to justify WED-type projects that instrumentalized women's roles – yet these linkages often do not stand up to historical or anthropological scrutiny.[55] Equally problematic is the assumption that sacralized views of 'nature' go hand-in-hand with harmonious environmental practices and egalitarian gender relations, since relationships between religious beliefs and environmental practices can entail struggle and conflict as well as harmony.[56] The great potential of ecofeminism, however, lies in its critique of modern science and strong endorsement of local and indigenous knowledges.[57] Ecofeminism also inspired and continues to inspire social movements and political action (e.g., anti-nuclear and peace movements), thus providing scope for alternative pathways and articulations.[58] Through its focus on the subsistence realm, it strongly endorses ideas of a 'moral economy' based on mutuality and co-operation. These issues are currently being picked in discussions on the care economy and gendered critiques of the green economy (See section 3.6). Finally, the critiques of universalism in some ecofeminist arguments highlight the importance of recognizing diversity in gendered identities, values and contexts. Such critiques and arguments around WED and ecofeminism circulated intensely in the 1990s, making this a vibrant period for debates concerning gender and sustainable development.

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53 See Jackson, 1998, for a fuller discussion.

54 Harcourt and Nelson 2015.
55 Joekes et al. 1996.
56 Croll and Parkin 1992.
57 See also Wichterich 2012.
58 Harcourt and Nelson 2015.

3.4

Rio and beyond: The emergence of gender relations

The United Nations Conference on Environment and Development in Rio, 1992 provided a landmark forum where diverse approaches to sustainable development were debated by governments, civil society and social movements. At the global level, the Rio conference launched high-level convention processes geared to realizing sustainable development ideals in relation to what were seen as key global environmental issues. These included the UN Framework Convention on Climate Change (UNFCCC), the Convention on Biodiversity (CBD) and the Convention to Combat Desertification (CCD), setting in train intergovernmental negotiations and processes, and associated civil society action on a global stage, that have continued to the present. At national level, many governments put in place sustainable development commissions and national action planning processes aimed at meeting global commitments and ideals, which tended to be translated into an array of environmentally focused policies and sector-focused interventions.

Following Rio, however, progress on the major 1992 targets was disappointing, and many national sustainability action plans became forms of managerialism that failed to challenge the economic and institutional interests and practices that supported unsustainability.[59] Sector-focused conservation interventions aligned with biodiversity and anti-desertification often proved more straightforward to implement, dealing as these often did with settings deemed 'marginal' from the centres of industrially led economic growth. Many of these policies and interventions proceeded without explicit regard to gender, however, and thus produced gender-differentiated effects in terms of livelihood, labour and resource control that went unheeded and unmitigated by implementing agencies. While local people's inclusion and participation were emphasized at least rhetorically, the extent to which they were realized in practice was variable; schemes that conserved environments at the expense of local economic and social interests often prevailed and were sometimes resisted.[60]

The Rio 1992 conference also conceived Agenda 21, a more local-level process that envisaged sustainability being built from the bottom up through initiatives by local governments, community groups and citizens.[61] Among other interventions, Agenda 21 stimulated a plethora of 'community-based' sustainable development projects and programmes across the world, supported by governments, NGOs and donor agencies, focused on local and joint community-state co-management of water, fisheries, forests, wildlife and urban environments. Yet, despite successes, many suffered from an overly homogeneous and romanticized view of 'the community' that failed to take into account socially and gender-differentiated perspectives and priorities – tensions that undermined the effectiveness of interventions as well as their outcomes in terms of social equity.[62] 'Women' and 'community' were often interchangeable terms in the documents of this period. Where gender issues have been acknowledged, this has usually taken the form of inclusion of women in project management committees and resource user groups. Such inclusion has often been tokenistic and ineffectual, but where genuinely able to influence decision-making it has been associated with improved outcomes in both social and environmental terms, as Agarwal (2010) has shown for community forest management in India (see also Box 4.1).

In the run-up to Rio, a wide coalition of NGOS, including the Women's Environment and Development Organization (WEDO), Development Alternative with Women for a New Era (DAWN) and others, undertook a range of activities to influence environmental debates and mainstream gender. The Women's Action Agenda 21 emerged, which fed into the 1991 Miami World

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59 Berkhout et al. 2003.

60 Brosius et al. 2005, Dressler et al. 2010, West et al. 2006.
61 Lafferty and Eckerberg 1998, Selman 1998.
62 Dressler et al. 2010, Leach et al. 1999.

Women's Congress for a Healthy Planet prior to the 1992 Rio Conference. This critiqued existing pathways of economic development and free market thinking and argued for a new ethics regarding economics and nature through the concept of 'sustained livelihoods'. Similar to contemporary debates around the need to rethink the care economy, this concept flagged the need to make links between the everyday practices of care, social reproduction and resource justice – ranging from control over local property rights to the power to make decisions.[63] Many women's networks emerged as part of the 'Global Women's Lobby' in Rio, and post-Rio debates did recognize women as important actors in environmental protection and poverty alleviation but treated gender in an instrumentalist rather than in a transformative way. Thus, DAWN and other groups regarded 'sustainable development' as a huge contradiction and called for gender-equitable development and transformation of the market and growth-based development models.[64]

3.5

Feminist political economies and ecologies

From the early 1990s, feminist scholars advanced social relational perspectives on environment and sustainable development. Many of these were grounded in feminist political economy analyses, especially of households and agrarian change and of States, markets, production and reproduction[65], as well as in gender and development (GAD) scholarship. Feminist political economy continues to offer invaluable critiques of dominant development pathways and the ways they produce social unsustainability and gender inequality, advocating transformational alternatives based on rights, capabilities and social and gender justice.[66] Integrating ecological dimensions gave rise to feminist environmentalism[67], gender, environment and development (GED)[68] and feminist political ecology.[69] These all offered gender analyses of environmental relations, although they differed in their emphases.

Core elements of this gender analysis of environmental relations included first, that women's (and men's) relationships with the environment emerge from the social context of dynamic gender relations. This challenges any notion that women a priori have a special relationship with the environment, let alone a natural and unchanging one. Thus, if women in any particular setting appear to be closely involved with natural resources or ecological processes, this is usually due to unequal power relations or lack of access to alternatives: for instance, if women gather wild foods, this might reflect their lack of access to income from trees on private holdings[70]; and the fuelwood head-loader might have failed to negotiate with her husband to purchase fuels as others in her village might be doing. There is thus close attention to gender identities and subjectivities, understanding women and men as diverse social groupings that encompass multiple identities as spouses, co-workers, parents, siblings, members of particular ethnic groups, etc. – all of which operate and are negotiated in relational ways.

Second, different kinds of women and men have very different interactions with land, trees, water and so on associated with dimensions such as class, age, backgrounds and kinship positions – differences that apply to men too. Recognizing differences and social relations among women clearly undermines any notion of groups formed through homogeneity of position and interest. Third, unlike WED, which focused on roles, importance is given to relations of tenure and property and to control over labour, resources, products and decisions. These shape people's environmental interests and opportunities. Environmentally related rights and responsibilities are almost always

63 See Wichterich 2012.
64 Wiltshire 1992.
65 See Beneria and Sen 1981, Young et al. 1984, Folbre 1994.
66 Rai and Waylen 2013.
67 Agarwal 1992.
68 Braidotti et al. 1994, Leach 1994, Joekes et al. 1996.
69 Rocheleau et al. 1996.

70 See Rocheleau 1988, Agarwal 1992.

contingent on class, kin and household arrangements and the negotiations these entail; arrangements that need to be understood and addressed if the aim is to enhance women's rights and agency.

Fourth and finally, gender analyses of environmental relations pointed out the fallacy of assuming that women's participation in environmental projects is coterminous with benefit. Social institutions and negotiations can clearly deny women control over the products of their own labour, while diversion of women's labour without remuneration may reduce their access to own-account income.[71] There is also a possibility of conflicts between environmental and women's gender interests; for example, that allocating women responsibility for 'saving the environment' could increase their workloads or reinforce regressive gender roles rather than representing progressive change or enhanced gender equity.[72] These issues were also linked to the property rights debates of the late 1990s[73] regarding the potential and pitfalls of involving communities in natural resources management.

GED offers many key insights into a gendered pathways approach. These include its focus on gender relations as imbued with power and as both shaping and shaped by interactions with ecological, technological and political-economic processes. It is also concerned with the distributional effects of dominant pathways, projects and policies, asking, for instance, what rights, resources and opportunities are enabled through particular projects around land and food. In addition, through the recognition that gender relations are dynamic, it is cognizant of how social institutions work together to create and maintain advantages and disadvantages and to shape opportunities with respect to ecologies, technologies and economies. Thus trade-offs between different pathways and their processes and outcomes are implicitly recognized. GED, however, is not very concerned about the politics of knowledge and feminist critiques of science or dominant knowledge production, issues explicitly the focus of feminist political ecology (see below). Its focus on local livelihoods and power and gender relations at household and community levels ignores multi-scale relations

and challenges arising through local-global linkages. Finally, there is also a danger that – as with gender and development (GAD) perspectives more broadly – it can become apolitical, focusing on gender mainstreaming into current political and economic structures while avoiding critique of these.

Feminist political ecology (FPE) draws on GED debates, as well as elements of the WED and eco-feminist debates of the 1980s. It is also based on a gender analysis of women and men's relationships and interactions with the environment. Unlike earlier approaches, however, the environment here extends beyond natural resources to encompass all historical processes of political and economic change that shape ecological change and people-environment relations. FPE as a framework of analysis builds on political ecology to include gendered power relations across a range of scales: between local, intra-household and intra-community processes and those that extend up to global scales. The basic tenets of FPE underscore the contingent and structuring nature of gender in environmental knowledge, in access to and control over resources and in emancipatory social movements that aim to empower women in community struggles for resource control and environmental protection.[74] A particular focus has been a critical view of romanticized visions of 'community' that side-step questions of class, gender or other social divisions.[75]

Within most versions of FPE, gender relations between women and men are seen as socially constituted and embedded in social relations of production and reproduction, themselves shaped by dynamic economic and political processes.[76] Nonetheless FPE is diverse and multi-stranded, and it is not uncommon for find analyses that eschew romanticization of an undifferentiated 'community' only to romanticize women's connection to nature and ways of knowing in a similar vein to ecofeminism. Equally, at least in some conceptions of FPE, there are dangers of romanticism (and sometimes essentialism) in ideas of 'the indigenous' and indigenous movements and what they embody and represent.

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71 Green et al. 1998.
72 Jackson 1998, Leach 1992.
73 See Agrawal and Gibson 1999.

74 Rocheleau et al. 1996, Nightingale 2006.
75 See Agarwal 2002, Rocheleau et al. 1996, Asher 2004, Resurreccion 2006.
76 Rocheleau et al. 1996.

Importantly, FPE represents feminist challenges to epistemology, objectivity and rationality while embracing the gendering of knowledge, human embodiment, subjectivity and political agency.[77] Thus while building on GED, FPE adds new critical dimensions. Drawing from feminist critiques of science[78] and from indigenous, feminist and social movements, it opens up attention not just to gendered rights but also to multiple gendered ways of knowing and being, and multiple visions of the future.

FPE therefore brings many further valuable insights to a gendered pathways approach. It challenges the basis of power and knowledge in gender relations and economic systems that structure development pathways. It highlights how gendered knowledges and multiple forms of knowledge can shape and co-construct alternative pathways to sustainability. FPE's emphasis on different scales highlights how different pathways may unfold, the implications of changes at one scale for others and how pathways intersect and with what consequences for whom.

In recent years, new dimensions have been added to the debates in GED and FPE through new feminist political ecology (NFPE).[79] This builds on the notion that gender is 'performed' in different contexts and thereby encompasses multiple and complex subjectivities.[80] It recognizes that gendered subjectivities and identities are performed, embedded and contested through people's actions in experiencing, creating and using environments, requiring attention to 'the entangled processes of the production of nature and subjectification/subjection as this relates to gendered roles, landscapes, bodies, livelihood strategies...'.[81] A performative approach to gender draws attention to the processes by which the 'gendered subject' is continually constructed and reconstructed, as performativity is 'the vehicle through which ontological effects are established'.[82]

It shatters essentialist and binary views of gender. As Butler emphasises, gender is not a pre-given fact but is a constructed phenomenon reproduced in and through practices, policies and actions associated with shifting and changing environments.

NFPE perspectives include an analysis of embodied subjectivities of women and men in relation to environment resource use, access and management through feminist material and emotional geography perspectives.[83] The analysis therefore explores how the materiality of environmental practices and the emotions that accompany these experiences, produce gendered subjectivities, ideologies and identities. This is especially useful in understanding women's embodied livelihoods and the ways in which women relate to different ecologies.[84] NFPE perspectives draw from feminist geography to show gender as a constitutive force across multiple and interconnecting scales of analysis, highlighting that it is at the level of the intimate that national and international power relations are produced and sustained.[85] As Elmhirst (2011) notes, these concerns have arisen with the advent of new economic reform programmes that have on the one hand shaped a market-oriented approach to natural resource management, and on the other resulted in changing patterns of resource use among rural populations due to greater mobility, all of which have called for new forms of intervention and environmental governance (see discussion of the 2000s to follow).

NFPE has also been enriched by productive engagement with queer theory. Untangling the relationships between gendered and lesbian, gay, bisexual and transgender (LGBT) identities and rights has added new dimensions to the analysis of intersectionality. Queer theory has deepened opportunities to explore the embodied elements of subjectivity and desire. Queer ecofeminist theorists use queer theory in order to challenge the heterosexist and essentialist limitations of ecofeminism.[86] Recent work in NFPE is drawing on these contributions to begin to debate

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77 Wright 2010: 819.
78 See Haraway 1988.
79 Harcourt and Nelson 2015.
80 Resurreccion and Elmhirst 2008, Butler in Osbourne and Segal 1994.
81 Hawkins and Ojeda 2011: 250.
82 Butler in Osbourne and Segal 1994: 33.

83 Elmhirst 2011, Sultana 2011, Harcourt and Nelson 2015.
84 See Nightingale 2011.
85 Elmhirst 2011, Truelove 2011.
86 See Gaard 2011, Bauhardt 2013.

'queer ecologies' and feminist perspectives and practices around them.[87]

NFPE can thus add to our conceptualization of pathways by highlighting the performative and subjective dimensions of gendered identities and how gendered subjectivities, ideologies and identities are produced, employed and contested within and among different pathways. NFPE concerns also reflect many of the challenges of the 2000s, to which we now turn.

3.6

Sustainability politics: Whose futures count?

As the world approached the run-up to Rio+20, the 2012 United Nations Conference on Sustainable Development, the general tone of debate contrasted with that of 20 years earlier. First, while concepts such as ecological integrity and well-being and the notion of three pillars to sustainable development – economic, environmental and social – from the Brundtland report still prevailed, implementation challenges over the previous decades led many to dismiss sustainability and sustainable development as empty rhetoric, with cynicism about the capacity of international and national systems to rise to the challenge. Second, and compounding this, the 1990s and 2000s had seen the consolidation of neo-liberal policies and practices, the rise of corporate power and growing political and economic strength among 'rising powers' including the BRICS countries, creating an even more challenging landscape for international co-operation in and implementation of sustainable development. Public debates on water privatization, genetically modified organisms, biodiversity, land grabbing and other concerns were also fuelled through the 2000s by the flourishing of green politics, social movements and activism around environment and development in many parts of the world. Movements variously contested and resisted dominant development paths, pointing out their negative ecological and social consequences and also providing alternative visions and ways of life. In most cases, activist positions have linked questions of sustainability very firmly with questions of gender and other forms of inequality and (in) justice.

'The Future We Want' was the motto of Rio+20. Yet, feminist commentators such as Wichterich (2012)

have argued that feminist visions were markedly absent from this future despite the progress made since Rio 1992 by scholars, women's movements and networks. Indeed, as we go on to outline, current mainstream literatures and policy discussions for the most part pay very little explicit attention to gender. To the extent that they do, they often continue to see women as victims or mobilize problematic narratives about women for narrow environmental goals. We now outline some of the key dimensions of contemporary debates around sustainability, focusing on three key sets of discourses and practices: around climate change, planetary boundaries and the green economy. We also examine their gendered critiques and discuss how they are affecting policies and on-the-ground processes.

Climate change

Since the 2000s, climate change has come to be projected onto the public stage as a real issue involving politics, economics and injustice that people have to take seriously. The relative successes and setbacks of global climate change processes, difficulties in implementing principles of 'common but differentiated responsibility' in mitigating far-reaching threats and the plight and coping strategies of people already faced with the need to adapt to climate change have become the focus of public reaction and a renewed and globalized environmental politics involving movements and campaign groups stretching across local and global levels.

Despite the strong progress made by gender activists at the first Rio conference, the 1992 UNFCCC made little mention of gender. Efforts to mainstream gender issues into climate change debates have been

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87 Harcourt et al. 2015.

extremely piecemeal and conducted, some suggest, almost as an afterthought.[88] Initially there was very little attention paid to gender issues in both the treaties and protocols.[89] As gender analysts of climate change have argued, the focus on universal issues and general consensus means that a focus on gender has been compromised. It is also striking that even though equity is a major issue in climate change debates, gender equality has been completely neglected.[90]

Only in 2008 did the UNFCC Secretariat call for gender-sensitive measures. 'No climate justice without gender justice' was a rallying cry for feminist lobbyists at the Bali conference of 2008. At Bali, several UN bodies and WEDO launched major groups such as the Women for Climate Justice Network and the Global Gender and Climate Alliance.[91] Analysis pointed out, for instance, that because women are more dependent on common property resources (CPRs) and rain-fed agriculture (v/s irrigated land), and because they lack diverse employment opportunities and access to credit, the costs of climate change often fall disproportionately on them. Women's and men's abilities and the economic, political and social tools at their disposal to address their climate change concerns also differ.[92] Nevertheless, despite such arguments, initially not a single woman was part of the advisory group on climate financing established in 2010.[93] Official climate change documents are often replete with gender stereotypes.[94] While it is true that women may be more vulnerable to the effects of climate change due to their unequal socio-economic status and lack of realization of rights, to cast them constantly as victims of climate change denies their potential roles as agents in re-shaping and re-casting climate change debates and policies and responding effectively to varied climate change impacts. These stereotypes also extend to the sustainable technologies that are developed to tackle climate change. As Wong (2009) has argued in his research on solar home systems in Bangladesh, women's inclusion in technical committees as part of the new rules of

participation that accompany sustainable technologies may not effectively challenge gender stereotypes. Indeed so-called sustainable technologies can create additional workloads for women in contexts where entrenched discrimination is interwoven with many other factors of inequality.

Gender inequality is at the heart of climate change issues. Work on women and vulnerability, however, rarely looks at the gender inequalities underlying particular vulnerabilities. Nor does it attend to the specific knowledge and capacities that women and men could contribute to low-carbon development, as Otzelberger (2011) points out. Furthermore, climate change policies are not gender neutral. Policies and technological approaches geared towards climate change mitigation often overlook differences in the carbon footprints of different social groups and their varied capacities to achieve greenhouse gas reductions. Those with lower incomes or limited resources at their disposal, which includes most poor women and men, have less ability to cope with these policy challenges.[95] Thus, gender-specific differences in emissions as well as adaptive and mitigative capacity must be fully acknowledged and incorporated into the design and implementation of response strategies.[96]

Much of the debate on gender and climate change has focused on adaptation and local-level vulnerabilities, whereas issues concerning large-scale, technology and market-focused mitigation initiatives related to growth have been slow to integrate aspects of social and gender justice. Climate finance debates have also been very gender-blind.[97] This reflects the overall lack of integration of gender into national and international policies in general (see section 5). Even international agreements on gender equality – such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), for example – are insufficiently reflected in national adaptation or low-carbon development plans.[98] This poor integration reflects the 'universal' nature of climate change debates, the focus of global efforts on

88 Denton 2002.
89 Skutsch 2002, Lambrou and Paina 2006.
90 Lambrou and Paina 2006.
91 See Terry 2009.
92 Agarwal 2002.
93 Wichterich 2012.
94 See Arora-Jonsson 2011, MacGregor 2010 for critiques.

95 See Lambrou and Paina 2006.
96 Ibid.
97 see Schalatek 2013.
98 Otzelberger 2011.

addressing emissions and the persistence of problematic images of women as victims. As the history of feminist engagement with global debates and institutions reveals, feminist visions are often highly critical of dominant paradigms and discourses, and it is easier for policy makers to focus on simplistic imagery rather than take on board more radical concerns. It is, however, these that are needed to truly tackle the global challenges of climate change and to rethink dominant pathways around consumption and production. It is interesting to note that even the World Bank acknowledges that low-emissions development pathways can be more effective and equitable when designed using a gender-informed approach.[99]

Planetary boundaries

A second contemporary feature is the rise of scientific concepts and arguments centred on notions of the 'anthropocene' and 'planetary boundaries'. Highly influential analyses grounded in an emerging set of earth system sciences suggest that we have entered a new geological epoch, the anthropocene, in which human activities have become the dominant driver of many earth system processes including climate, bio-geochemical cycles, ecosystems and biodiversity. The extent of human influence, driven by intensifying material production and consumption, has grown rapidly since the industrial revolution and accelerated dramatically since the 1950s (see Section 2). A series of nine planetary boundaries has been identified, referring to the biophysical processes in the Earth's system on which human life depends.[100] Together, these serve to keep the planet within Holocene-like conditions, which are the only ones known to provide a so-called 'safe operating space' for humanity. Potentially catastrophic thresholds are in prospect, it is argued, that will compromise development both globally and locally. It is thus urgent that development pathways reconnect with the biosphere's capacity to sustain them.[101] A recent update identifies two core boundaries – climate change and biosphere integrity – either of which, it is claimed, could on its own drive the Earth

System into a new state should it be substantially and persistently transgressed.[102]

While the science is still developing, the concept of planetary boundaries has been rapidly taken up within policy debates, including those around Rio+20. Yet many actors, including developing country governments, have contested the concept, interpreting it as anti-growth and development. Some suggest that planetary boundaries bring a return to 'limits to growth' thinking and a privileging of global environmental over local concerns, justifying top-down interventions that protect the environment at the expense of people and their livelihoods. That steering development within planetary boundaries should not compromise inclusive development that respects human rights has been proposed by Raworth (2012), whose 'doughnut' concept takes the circle of planetary boundaries and adds an inner circle, representing a 'social foundation'. In between these is a 'safe and just operating space' for humanity, within which development must take place. Yet even this fails to address the possible divergences and trade-offs between some people's notions of a good life, and visions for the future, and scientifically defined environmental limits. Meanwhile the new, neo-Malthusian narratives of impending scarcity and catastrophe implied by some interpretations of planetary boundaries arguments risk justifying a return to draconian policies and unjust responses that limit people's rights and freedoms. To date – with the exception of Raworth (2012), who introduces 'gender equality' as one dimension of the 'social foundation' of humanity's safe and just operating space – discussion and advocacy arising from the planetary boundaries concept has been gender-blind.

Green economies

A focus on green economies was also central at Rio+20 and is now capturing the attention of governments, businesses and NGOs alike. According to the United Nations Environment Programme (UNEP), which launched its Green Economy Initiative in 2008, a green economy is 'one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological

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99 World Bank 2011.
100 Rockström et al. 2009.
101 Folke et al. 2011.

102 Steffen et al. 2015.

scarcities. Although there are many versions, in its simplest expression, a green economy can be thought of as one which is low carbon, resource efficient and socially inclusive'.[103] Although this would appear to demand an integration of environment, economy and social development no different from other conceptualizations of sustainable development, in policy and practice green economy thinking has come to drive a particular range of approaches. These include a focus on business and private sector action, albeit motivated and regulated by the public sector, in investments, technologies and innovations that enhance energy and resource efficiency and prevent the loss of ecosystem services. There are opportunities to deliver profit, employment and environmental sustainability at the same time in forms of 'green growth', it is claimed, provided investments are correctly targeted. Indeed it is argued that the emerging green technology economy – in areas such as renewable energy – will be worth $4.2 trillion annually by the year 2020.[104]

While these approaches assume that continued economic growth can be reshaped in green directions, others argue that environmental constraints will require much-reduced rates of growth – or even no growth – as well as different types of growth. The idea of 'decoupling' promoted by UNEP[105] suggests that economic growth should be de-linked from the increasing consumption of material resources such as construction minerals, ores and industrial minerals, fossil fuels and biomass and their associated environmental costs. Jackson (2009) argues for a shift in economic thinking and strategy to emphasize the pursuit of prosperity and well-being. Investments in services and care, as well as in 'green' action in the areas of sustainable food production and marketing and clean energy, are seen as key for such 'prosperity without growth'. These arguments connect with growing debate around alternative economies and solidarity economies[106], drawing on evidence from mostly local-scale modes of organizing and social movement activism around the world.

Green economy thinking also calls for a focus on maintaining and enhancing natural capital, supported by valuation and accounting measures that build on but extend the environmental economics work of the 1990s[107] and on market-based approaches to environmental protection. The latter include an array of schemes to value and trade aspects of ecosystems now (re) defined as commodities. They include schemes for trading carbon credits and offsetting emissions, such as those associated with clean energy, forests and agriculture under the Clean Development Mechanism (CDM), UN Reduced Emissions from Deforestation and Degradation (REDD) and voluntary schemes. While livelihood benefits to local people are often claimed, it is highly variable whether these are realized in practice (see Box 4.2). Critics point to mounting evidence of such financialization and commoditization of ecosystems being linked with forms of land and resource dispossession, or land, water and green grabs.[108] Little wonder then that women's organizations in Latin American resolutely rejected the concept of the green economy as a motto for Rio+20.

While green investments and technologies offer vital opportunities in building pathways to sustainability and green transformation, questions of justice and social values are often missing in the debate. Thus narrow forms of financial value – of ecosystems and resources – overlook social and cultural values, including those that have emerged from long co-existence of people and ecosystems. And attention to the differentiated social and gender implications of 'decoupled' and green economies – and even prosperity-focused care economies – is often lacking. Not addressed is whose priorities count and who may gain or lose from the resulting policies and interventions. For instance, even though there is some mention of Millennium Development Goal (MDG) 3 on gender equality, the Green Economy Report[109] makes no mention of the differentiated impacts of the green economy on women and men or what exactly the transition to the new economic model will mean for different groups of women and men.[110] Thus, mainstream approaches

103 UNEP 2013.
104 NUDGE 2009.
105 Fischer-Kowalski et al. 2011.
106 Unmüßig et al. 2012.

107 See Natural Capital Committee 2013.
108 See Fairhead et al. 2012, Mehta et al. 2012, Borras et al. 2011.
109 UNEP 2011.
110 See Naret and Stock 2012.

to defining and developing green economies have been virtually gender-blind.

Feminists such as Liane Schalatek (2013) have argued that Rio+20 missed a chance to break with the business-as-usual global economic model that is a root cause of global environmental destruction, social exploitation and inequality. She and others[111] see the green economy as a market-based approach that justifies the commodification and enclosure of resources and hence undermines local livelihoods, justifies land grabs and also displaces local people, especially the women subsistence farmers who comprise most of the food producers in developing countries. Similar criticisms were also made by the Women's Major Group. They and others called for a 'gender-equitable sustainable development framework which must marry care economy and green economy approaches to address the persistent exploitation of women's largely unpaid social reproduction and care work as well as in order to stop treating natural resources and the environment as an inexhaustible and unaccounted for source of productive inputs'.[112]

The Women's Major Group made several contributions to the Rio+20 processes, articulating a strong case for social equity, gender equality and environmental justice to be a central part of these processes and placed at the heart of sustainable development. They advocated for using the term 'sustainable and equitable economy' as opposed to green economy. In addition, they have argued for the need to infuse the economy with ethical values such as respect for nature, spirituality, culture, harmony, sharing, solidarity, caring and sharing.[113]

Related to green economy thinking, new work from feminist economists and analysts has reinvigorated earlier critiques of the separation between production and social reproduction and the power relations that uphold these.[114] There are now calls to replace efficiency with sufficiency[115], emphasizing sharing,

redistribution and 'commoning' as guiding principles. In a so-called 'caring economy', feminists are calling for a redistribution of labour and value creation that goes beyond the market, efficiency and remuneration[116] and for a new conception of what constitutes 'the good'. In different ways, these strands are all calling for new transformatory politics that will lead to different pathways across different scales, contrasting with those being advocated in mainstream versions of the green economy.

This paper shares the emphasis of recent critical debates on the need for transformation across scales in existing patterns of investment, production and consumption. This is not just for planetary reasons; development must be people-centred, implying stronger attention to local environmental concerns and to the intertwining of environments with livelihoods and ways of life. However, recent approaches – whether to climate change, planetary boundaries, green economies or in connecting these – have an overly techno-centric and economistic focus. In different ways, each opens the way for either a techno-regulatory, top-down style of development or a neo-liberal market-led one. At the same time, new and problematic narratives of environmental catastrophe and crisis are afoot. Underplayed are questions of power and of social values, distribution and justice – including gender – in regard to both how problems of sustainability emerge and how they, and responses to them, are experienced

This account of the last few decades of thinking, policy and practice has also clearly highlighted that sustainability and sustainable development are political. An array of concepts, approaches and associated policies and actions have emerged and continue to co-exist to the present, with much contestation. Feminist and gender-based analysis and action have been and remain key, although capacity to shape the mainstream has varied. Yet feminist thinking is also varied, producing a number of different narratives about women, gender and sustainability. Which concepts and approaches offer the most helpful insights and contributions to a fully gendered pathways approach?

111 See Wichterich 2012, Unmüßig et al. 2012.
112 Schalatek 2013: 8.
113 Women's Major Group 2015; see also UNDP 2013.
114 See Vaughan 2007, Mellor 2009.
115 See Mehta 2010, Salleh 2009.

116 See Wichterich 2012.

4.

ELABORATING A GENDERED PATHWAYS APPROACH

Returning to our definition, the challenge is to identify and build pathways of sustainable development – that is, development that ensures human well-being, ecological integrity, gender equality and social justice, now and in the future. Pathways, as defined and illustrated earlier, are alternative directions of intervention and change, underpinned by particular framings and narratives that embody selective values, knowledge and power relations. Pathways can emerge from the unintended actions of multiple actors, coming to align in particular directions. They can also be shaped and steered through active intervention by citizens, governments and other actors. As previous sections have shown, there are urgent needs to challenge current unsustainable pathways of production, consumption and distribution and to recognize and support alternatives.

Insights from feminist scholarship offer valuable ways to enrich and elaborate a pathways approach, integrating a concern for gender equality into both the processes through which pathways develop and unfold and their outcomes. As previously noted, they underscore the importance of addressing not just gender but the ways that this intersects with class, race and ethnicity, sexuality, place and other significant axes of difference. Feminist political economy and GED approaches highlight the significance of gender relations and institutions – from households and kinship to States and markets – as part of pathways. Together with rights-based and capability approaches, they emphasize the importance and ingredients of substantive gender equality as key pathway goals or outcomes. These need to include equal access to decent work and secure livelihoods, the proper recognition and redistribution of unpaid care work and equal access to key social and environmental services and benefits. Linking with ideas around green transformations, feminist political economy also

underscores that sustainable development may not be possible without quite fundamental restructuring of political-economic-environmental relations.

Feminist political ecology (FPE) and new feminist political ecology (NFPE) approaches highlight the importance of selective knowledge and power, underscoring the importance of challenging problematic narratives about gender and sustainability and making space for alternative narratives and pathway processes built on alternative, gendered forms of knowing and being. They highlight the diversity and performative, embodied character of femininities, masculinities and related identities. Such identities may be performed and expressed as part of the construction of particular pathways, or in opposition to them – as when identity-based resistance movements challenge powerful pathways, for instance. NFPE also offers insights into the enhancement of recognition and dignity as key pathway goals. As we have seen, this requires challenging stereotypes around masculinity,

femininity and their interconnections with ecology and economy and assuring not only freedom from violence and from violations of dignity and security abut also bodily integrity and sexual and reproductive health and rights. Finally, NFPE – along with feminist analyses of politics and governance – emphasizes the importance of equal participation in decision-making and that this must happen at multiple, interconnected scales. It highlights the positive outcomes – in terms of alternative narratives and visions of the future linked to pathways that generate sustainable and gender-equal outcomes – that come from supporting women's agency, power and voice and creating space for feminist collective action.

For gender equality to become real, pathways therefore need to generate capabilities and freedoms that go beyond basic material needs and rights. They also need to include opportunity and process freedoms that allow people to convert resources into multiple capabilities. The hope is that these then feed back to sustain ongoing processes of pathway generation and maintenance that further reinforce sustainable development and gender justice. In this way, pathways to sustainability and gender equality 'lock in'. However, it will often not be a linear process; there will be unexpected events, opportunities and setbacks to which people, institutions and ecologies will need to adapt and respond.

Moreover, just as many pathways have converged in current, unsustainable directions, so too there are multiple possible sustainable development pathways. These may be associated with the values and goals of different groups or places or across spatial and temporal scales; they may refer to particular dimensions of ecological integrity, or they may prioritize particular dimensions of gender equality. We need to respect diversity – to suit the hugely varying circumstances, lives, identities, perspectives and priorities of different women and men in different places across the world. We also need to recognize tensions and trade-offs between pathways; not all pathways that move towards ecological integrity or economic sustainability promote gender equality, and vice versa.

The interactions, feedbacks, non-linearities, trade-offs and tensions involved as pathways unfold are well illustrated by the examples of forest governance and sanitation (Boxes 4.1 and 4.2). These highlight that the process of adjudicating between pathways is a deeply political one that needs to involve inclusive deliberation around values, choices and outcomes. Reflective learning processes – about what is working to sustain what for whom, with what implications for gender equality – should also be part of pathway creation processes, and these too need to be fully inclusive of women's and men's diverse knowledges and perspectives.

BOX 4.1

Forest pathways and gender equality

Forest landscapes are a good example of the interaction of ecological, social, technological and political-economic processes in shaping change. Whether in humid forests in Africa or the lowland and montane forests of South Asia, vegetation cover and quality reflect the dynamic interaction of ecology, soil and climate with people's uses and practices, the latter shaped by livelihoods, social relations, knowledge, understanding and forms of property and tenure. As these relations co-evolve and intersect with diverse national and global policies and interventions, so a variety of possible forest pathways is possible in any given setting.

Forests are used and valued in gender-differentiated ways. For instance, women often have particular interests in sources of food, fibre and medicine through non-timber forest products or the fertility that forest fallows can bring to crops they produce and control. Gendered concerns with forest goods and services are cross-cut by class and ethnicity; thus in many settings it is poorer people who rely most closely on forest-based livelihoods. Values extend beyond the material, however, to the ways that gendered identities and subjectivities are tied up with trees and forests. In West Africa's Upper Guinea forest zone, for instance, visits and work in deep forest are associated with masculinized identities, embodied in the mythical figure of the hunter. Old settlement sites in deep forest are places of ancestral worship and social memories, important to the identities and status of landholding families. Feminized arenas of domestic life focus on field and forest fringe areas, but certain parts of the 'bush' are controlled by senior women who manage them as a locus for initiation society activities.[117]

There is thus a gendered politics to forest use and control: whose preferred trees or spaces to fell or preserve, who works where and who decides can be matters for contestation within households and communities. As such gendered negotiations play out, intersected by the social and political relations of labour and tenure, so different pathways of forest change may unfold.

Forests have been subject to many forms of policy and intervention, and as these have interacted with ongoing processes of change so new pathways have emerged, with varying outcomes for gender equality. From colonial times onwards, successive state, donor-led and non-governmental programmes have focused on goals from sustaining supplies of timber and non-forest products to protecting watersheds and biodiversity, geared variously to local, national or global economic or environmental interests. The latest round of interventions focuses on carbon and climate change, gearing forest management to protecting and enhancing carbon stocks and sequestration to mitigate a perceived global climate crisis by offsetting emissions produced in industrialized settings. The many schemes that have emerged – associated variously with the UN-REDD process, Clean Development Mechanism, Voluntary Carbon Standard or unaccredited private deals – all re-value forests as a source of a carbon commodity to be exchanged in emerging markets. They involve knowledge, values, institutions and practices aligned with broader neo-liberal environmentalism, geared to solving global sustainability challenges through financializing ecosystems and nature.[118] Projects are often justified through Malthusian narratives and associated methodologies that see forests as undergoing one-way degradation, with local users to blame.[119]

As these forest carbon projects play out on the ground, they have often created pathways that aim to meet global sustainability needs but exclude local forest users and their livelihoods, contributing to dispossession[120] and becoming 'green grabs'.[121]

117 Leach 1994, Fairhead and Leach 1996.

118 Büscher et al. 2012.
119 Leach and Scoones 2013.
120 Corbera and Brown 2008, Corbera and Schroeder 2010.
121 Fairhead et al. 2012.

The result is often greater inequality and injustice for local users vis-à-vis external agencies and global actors, and sometimes along gendered lines as well. Fostering greater justice in forest carbon pathways requires shifts in the institutional, knowledge and power relations through which they are designed and conceived – and far greater inclusion of local women and men.

An alternative set of forest intervention pathways has focused on community-based and joint forest management. From the 1980s to the present, these have generally conceived of sustainability in relation to local livelihood goals and cultural values, where necessary reconciling these with national and global priorities through collaborative institutions and decision-making. Such approaches thus have the potential to foster pathways that support local rights and capabilities. Yet the outcomes of community forest management for gender equality have varied considerably. In many cases, gendered interests and values in forest management have been subordinated to a generalized notion of 'the community' through institutions dominated by men and community leaders. Gender relations and gendered forms of forest knowledge and identities have not always been appreciated. In a similar way, indigenous people's movements forged around protecting forest livelihoods and identities from the effects of commercialization have sometimes been interpreted by their leaders and observers alike as reflecting 'community solidarity', neglecting the gendered politics of forest value and subjectivity.

Amid a plurality of possible forest pathways, those forged around women's knowledge and values, and where women have agency to express them, may be different from those that emerge where men are in control. In a related vein, Agarwal's (2010) work in Nepal and Gujarat, India shows that greater women's involvement in joint forest management processes is associated with positive outcomes both for forest ecology in terms that women value and for gender equality. Gender-related inequality is often associated with low or failed cooperation within forest management committees. Yet where women are full participants with voice and power in more gender-democratic community forestry institutions (where more than a quarter of the executive committee is female), gendered resource access is enabled with less strict forest closure regimes. Voluntary cooperation by women and greater gender equity in benefit sharing can be promoted, along with better forest quality. This supports pathways that simultaneously promote sustainability in local perspectives and gender equality.

Community-led total sanitation and gender equality

Access to improved sanitation has multiple benefits for women and girls. The privacy and dignity afforded through proper sanitation and separate facilities can improve girls' school attendance. Access to sanitation also prevents both women and men from losing critical days from work and livelihood activities due to ill-health. Sanitation processes and outcomes are determined by a range of social, technological and ecological dynamics. Cultural practices and perceptions of digestion, purity and pollution differ tremendously around the world, and there are diverse sanitation pathways possible in different settings that have a bearing on whether externally driven sanitation initiatives get local uptake or not. Technological aspects (space, materials, design) often profoundly interact with ecological considerations (e.g., proximity to groundwater sources, presence of pathogens, contamination possibilities) to shape sanitation outcomes.[122]

Until recently, dominant pathways around sanitation have tended to neglect these multidimensional and gendered aspects, and sanitation was the most off-track MDG, especially in sub-Saharan Africa. Dominant pathways have also tended to be top-down and prescriptive, often consisting of providing people with sanitary technology/ infrastructure involving subsidies for hardware, usually accompanied by public health behaviour change campaigns to encourage women and men to use the toilets. However, many top-down initiatives have failed miserably, especially in countries such as India, with local people preferring open defecation and using toilets for purposes such as storage. Until recently, there was very little discussion or concern for menstrual hygiene and how its lack severely affects girls' well-being and school attendance and performance.

Community-led Total Sanitation (CLTS), initiated by Dr Kamal Kar in 2000 in Bangladesh, has offered some powerful alternatives to mainstream sanitation pathways.[123] CLTS aims at encouraging local people to build their own toilets/ latrines according to the resources available and stop open defecation. This takes place through processes of self-analysis concerning the harmful impacts of open defecation. CLTS advocates a bottom-up approach to development in the belief that total sanitation can only be achieved and further sustained through empowering communities to take collective action for changing their own behaviour. It aims to encourage ownership, leadership and capacity among community members to bring about their own development. Gains made through processes of CLTS are both individual – in terms of improved health, more income arising from better productivity, reduced medical expenses and privacy and security for women – and collective – in terms of clean environments requiring the co-operation of every woman, man and child, leading to solidarity and social inclusion.

As regards gendered outcomes, CLTS can be empowering through improved reproductive and sexual health, work productivity, income and bargaining power. Women have also been encouraged to play an important leadership role in many communities and have emerged as 'natural leaders' with the potential to develop into leaders of women's collectives, district-wide sanitation initiatives and school hygiene programmes. CLTS can also increase the negotiating power of women in marriages as, once improved sanitation is introduced to an area, many women refuse to marry into a household that defecates in the open. These issues are important for its sustainability, spread and scaling up.

Still there have been challenges regarding sustaining behaviour change around sanitation.[124] This may relate partly to failure to go far enough with

122 see Movik 2011.

123 see Mehta and Movik 2011, Kar and Pasteur 1998.
124 Mehta and Movik 2011.

integrating gender equality. For example, expecting women to shoulder responsibilities for fetching water and cleaning toilets can impact sustainability. Women who are already burdened with work and have little time on their hands might not want to take on extra responsibilities that affect the continued behaviour change of using toilets and hand-washing. Menstrual hygiene issues may not always be tackled head on.

There is also the risk that certain groups/ communities could be excluded on the basis of the generation of powerful emotions such as shaming when non-compliance takes place. Gender inequality could also increase or not be addressed at all within existing social relations because most often CLTS is implemented within pre-existing relations in a society with the aim of achieving open defecation free (ODF) communities. CLTS has the potential to achieve solidarity and collective action, but it is not deliberatively designed to address social inequalities. Also while it has mobilized women en masse and enabled those in deeply hierarchical societies such as Haryana in India to assume leadership roles, CLTS also builds on traditional notions of women as the keepers of cleanliness and order in the family and may not necessarily challenge dominant relations of power and gender inequality. Finally, it also contains some unknown risks around groundwater and soil contamination, issues that were not considered when the approach was conceived and that can compromise ecological integrity. In sum, CLTS could do more to tackle both gender equality and ecological integrity in order to create sanitation pathways that truly promote sustainable development.

5.

TOWARDS GENDER-EQUAL SUSTAINABLE DEVELOPMENT: POLICY FRAMEWORKS AND POLITICAL STRATEGIES

To challenge unsustainable pathways and move towards sustainable development and gender equality will require action at many levels by a diversity of actors. States and inter-governmental processes must be central. However, key opportunities for transformation also lie in the ideas and actions of civil society and social movements, businesses and the private sector, communities and individuals – and in building gender-progressive sustainable development alliances between them.

States are the key arbiters and upholders of rights and freedoms for their citizens. Rather than leave everything to the market, States need strengthened capacity and ability to deliver on these in ways that respect sustainability and gender equality. This requires accountable frameworks that secure human rights, including gender-based rights in areas such as work and employment, reproduction and health, food and land, natural resource tenure, and rights to uphold and practice particular identities and sexualities. Governments also have central roles to play in providing public services, supporting the health, education and care of children, the elderly and the sick so essential to people's capabilities and for assuring social dimensions of sustainability and continued social reproduction. Public investment is also critical in nurturing and scaling-up key innovations that offer vital prospects for improving sustainable development and gender equality in areas such as the provision of modern energy services, water supplies and appropriate sanitation facilities.

There are, to be sure, growing opportunities for businesses and the private sector to contribute to sustainable development solutions – as emerging 'green economy' discourses emphasize. Nevertheless, these often require state support to be viable, at least in the early stages. Meanwhile growing evidence shows that partnership and 'co-production' arrangements – in which private, public and civil society actors work jointly to deliver health, housing or energy services, or manage forests, biodiversity or water – are often most effective. For such state or co-produced arrangements to work effectively for gender equality and sustainability, it is vital that women are centrally involved in planning and implementation – as Box 4.1, highlighting the advantages of women's involvement in forest management committees, exemplifies. Adequate financial resources are also required to achieve the goals of sustainable development.[125] Approaches to participatory and gender-responsive budgeting offer prospects for

125 Schalatek 2013.

greater inclusion of gender equity in funding allocation decisions and more accountability for tracking and reporting on gender-specific financing benchmarks.[126]

National policies are increasingly shaped by international regimes and frameworks, globalization processes and transnational policy transfer and learning. International human rights, particularly those dealing with relevant sectors (e.g., the right to water and sanitation, the right to food and CEDAW), offer important frameworks to which States should be held to account. As discussed, even though the Earth Summit in Rio made a strong commitment to promoting women's involvement, empowerment, equality and equity in sustainable development policy and practice, conventions emerging out of Rio have been patchy in their attention to gender. The UNFCCC contained some valuable entry points for gender equality in relation to climate change adaptation but few related to mitigation.[127] By contrast, the CBD affirmed the key role played by women in biodiversity.

However, to achieve sustainable development, gender equality and human rights need to be brought far more fully into policy frameworks dealing with environment, development and sustainability questions. Arguably, the Sustainable Development Goals (SDGs) framework signed by governments in 2015 provides the opportunity to do this.[128] The 2000 Millennium Declaration and the MDGs made commitments to both environmental sustainability (MDG 7) and gender equality (MDG 3), but goals, targets and implementation remained separate. The 17 SDGs commit the world to sustainability far more fully. They include a stand-alone goal on gender equality, goal 5, which was hard but successfully fought for by the Women's Major Group during the extensive, inclusive consultations that produced the framework. Yet the challenge now is to foster integrated thinking and action so that gendered concerns are not silo-ed into SDG 5. Rather, they need to be addressed in the implementation of other relevant goals – as they relate to water, climate, food, innovation and so on – so that unfortunate

trade-offs that marginalize women can be avoided and synergies between gendered rights and capabilities, and the development of sustainable pathways in these other areas, can be fostered.

Growing evidence and analysis show that sustainable development requires governance and action that extends from global across national to local levels. If well co-ordinated, such 'nested' or 'polycentric' approaches are the best placed to address environmental and economic challenges.[129] This suggests a need for questions of gender equality and for representation of women's interests to be included from local to global institutions.

Formal policies and rights frameworks are clearly insufficient unless policies are implemented and rights are made real. Despite all the progress made since the 1990s, we have already discussed how high-level processes around Rio+20 in 2012 were very disappointing from a gender equality perspective. As Wichterich (2012) has argued, gender/ sustainability issues have often disappeared from public view, in part because this 'double mainstreaming' is even more difficult than gender mainstreaming. Moreover, even women's movements and feminists have failed to make these linkages and instead have focused on issues such as reproductive rights, HIV and so on. It is also telling that the Platform for Action, the landmark document of the Fourth World Conference on Women in Beijing in 1995, placed women and the environment almost at the bottom of the list of critical areas of concern.

Equally, women's participation has too often translated into tokenism or co-optation. Feminist analysis and experience therefore point to the importance of informal political strategies and tactics in engaging with policy processes: resisting, re-shaping, subverting, re-claiming.[130] Feminist action is also central in challenging and re-working the discourses, cultures, practices, biases and stereotypes that beset policy institutions and organizations. This can

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126 See: http://www.gender-budgets.org/.
127 WEDO and IUCN 2014.
128 United Nations 2015.

129 Ostrom 2010, Agarwal 2010.
130 True 2003, Calas and Smircich 1999.

happen through feminist action within bureaucracies[131], where 'insider-outsider' strategies, informal alliances and relationship networks prove key in the complex process of translating policy into practice for desired outcomes. It can also be assisted by 'external' pressure from social movements and activism.

Indeed, the growth of movements around gender equality and 'green' issues – and their coming together in forms of collective organizing around sustainable development and social justice – is one of the most exciting developments of recent years. Building on long histories of movement activism, citizens, informal economy workers, producers and consumers in many countries and regions are organizing collectively both to contest dominant pathways and to advocate for – and indeed demonstrate – alternatives. Examples are multiplying rapidly. They include La Via Campesina, for example, which built from the 1990s into a globally networked movement to defend the rights of small farmers in the face of pressures from large-scale corporate agriculture.[132] Promoting a vision of small-scale peasant farming rooted in agro-ecological techniques, local markets and 'food sovereignty'[133], some strands, though by no means all, emphasize central recognition of and support for the rights of women as small-scale food producers. They include movements initiated by groups of poor urban dwellers in many cities in Asia,

Africa and Latin America, linking well-being and rights to homes and livelihoods with the design of decent, sustainable urban spaces.[134] In the case of Shack/Slum Dwellers International (SDI),[135] groups initiated around women's savings and credit associations and waste-pickers cooperatives have networked into a federated global structure that now covers 30 countries, linking local action with campaigning around global agendas. Many other examples are emerging around alternative and 'solidarity' economies, food, land, water and energy.

In such examples, collective action, organization and co-operation provide the basis for alternative pathways that provide routes to social, economic and political empowerment and to environmental sustainability. Networking and alliance-building provides routes through which the everyday actions and knowledge of women and men around work, industry, land, food, water, energy and climate in diverse places around the world can begin to add up and scale out into broader pathways. With appropriate state support, they offer powerful complements or correctives to current mainstream approaches that rely just on individuals and businesses linked through markets as the focus of sustainability and green economies as well as powerful hopes for transformed, more sustainable and gender-equitable futures.

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131 Rao 2006, Sandler and Rao 2012, Smith and Turquet 2012, Goetz 1997.
132 See: http://viacampesina.org/en/.
133 Borras 2004, McMichael 2009.

134 Satterthwaite et al. 2011.
135 See: http://sdinet.org/about-us/what-we-do/.

6.
CONCLUSION

In this paper, we have argued that gender equality must be integral to sustainable development. We have demonstrated many reasons why: apart from the moral and ethical imperatives involved, attention to gender differences and relations is vital to avoid the costs of economic and environmental change undermining gendered rights and capabilities and further compromising the sustainability of households, communities and societies. And it is crucial in order to recognize and build on the agency and knowledge of diverse women and men towards sustainable paths.

Around many issues – whether work and industrial production, population and reproduction, food and agriculture or water, sanitation and energy – dominant development pathways have proved both unsustainable and gender unequal. Economic, social and environmental unsustainability and gender inequality are both produced by and yet jeopardize market-focused, neo-liberal patterns of growth. As troubling intersections of unsustainability and gender inequality threaten or exceed planetary boundaries around climate change, biodiversity and pollution, so shocks, stresses and feedbacks may undermine gendered rights and capabilities even further. Yet as we have shown, the reverse is possible: gender equality and sustainability can powerfully reinforce each other in alternative pathways. Furthermore, different strands of feminist thinking have provided strong critiques of dominant patterns of unsustainability and put forward powerful tools to reimagine sustainability in a way that embraces social and gender justice.

Integrating gender equality with sustainable development requires a profound conceptual understanding of both concepts and their interlinkages. That is why this paper developed a 'gendered pathways approach', offering this as a conceptual framework for addressing the interactions, tensions and trade-offs between different dimensions of gender equality and of sustainability. Enriched through insights from several decades of feminist thinking and practice, especially in feminist political economy and political ecology, the gendered pathways approach offers guidelines to analysing current pathways of change and to imagining and appraising alternatives.

As we have demonstrated, there will always be tensions. Some pathways may promote sustainability at the cost of gender equality; others may promote gender equality and neglect key dimensions of sustainability. Since pathways are dynamic, they can also have unintended social, technological and environmental consequences that also affect outcomes in terms of gender (in) equality. Negotiating such dynamics requires inclusive learning and deliberation processes and ways to monitor exclusions, trade-offs and emerging opportunities, as well as ongoing awareness of the complex politics of both gender and sustainability.

In charting different approaches to sustainable development and gender, we also highlighted their potentials, problems and practical implications. We have seen how, in the name of environmental protection, local women and men have sometimes been dispossessed from their lands, forests and water resources; how due to problematic linkages between women and nature, women's roles as so called 'carers' of nature have been essentialized and they have been made responsible for environmental chores that draw on their voluntary labour. Such past mistakes and pitfalls must definitely be avoided in future.

We want to end with hope, however. There are many alternative pathways to sustainability and gender equality, albeit currently under-appreciated. They exist in urban and rural spaces where women and men make and sustain their livelihoods, in women's cooperatives and movements, in the writings of feminist scholars and in bureaucracies and global institutions. We need to seek out these champions and create conceptual and policy space for their ideas and practices. These offer powerful challenges to the logic of 'homo economicus' and to dominant patterns of consumption and production that are promoting structural inequalities and unsustainability. They offer alternatives with the potential to create green transformations that are gender and socially equitable. And an emerging progressive politics of gender and sustainability alliance-building – combining movements, States and enlightened businesses as well as formal and informal practices – offers the potential to make them real. Feminists have always been the ones to provide the most trenchant critiques of dominant thinking and ways of life, usually from the margins. It is now time to emerge from those margins and promote new ways of being.

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